Owner's Manual

INTERNATIONAL HARVESTER

SETTING UP INSTRUCTIONS

McCORMICK

(Also McCormick-Deering)

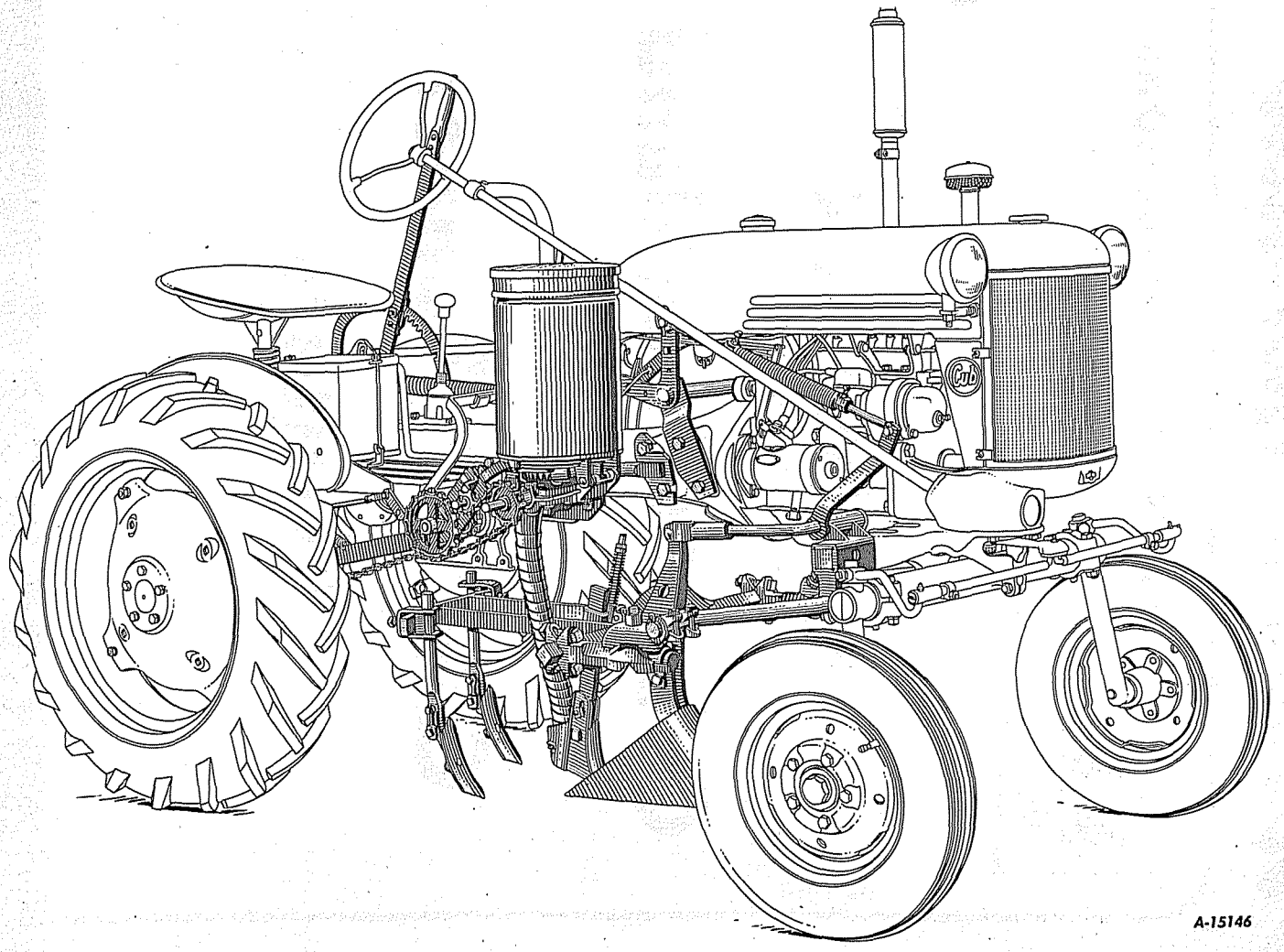
Cub-171 Blackland

and

Cub-172 Runner Planters

INTERNATIONAL HARVESTER COMPANY

180 North Michigan Ave. Chicago 1, Illinois, U.S.A.



A-15146

Cub-171 One-Row Blackland Planter (Manual Control).

TO THE OWNER

Two types of one-row planters are covered in this manual. They are the Cub-171 One-Row Blackland Planter (sweep type) and the Cub-172 One-Row Runner Planter. These planters are designed for use with the Farmall Cub Tractor. The operator of either of these planters has a clear unobstructed view of the seed row and is able to assume a comfortable position on the tractor seat and follow the marker guide mark without fatigue. The ground unit for both types of planters is a compact unit which can readily be attached to or detached from the Universal Mounting Frame without disturbing any of the set adjustments. This assures that the planter will work at the same depth and do the same job when it is re-attached when last used. The same hopper drive and mounting parts are used for both planters. The hopper is driven by a sprocket leading from the right rear axle. The hopper drive is automatically thrown in and out of gear as the ground unit is lowered or raised.

This planter may be used with tractors equipped with Hydraulic Touch Control. For manual control the planter requires the Master Control Lever and the Front Rockshaft.

The Universal Mounting Frame is required for use with these planters. This unit is used in various combinations with other direct-connected implements for the Farmall Cub Tractor. The same frame is also used with front-mounted cultivators and other front-mounted planters. It consists of two parallel-action gang assemblies, one mounted on each side at the front of the tractor. Each assembly includes a frame, push pipe with pressure spring, parallel-acting gangs and a tool bar attaching bracket. The attaching bracket is provided with a keyhole slot to facilitate attaching and detaching the ground unit without disturbing set adjustments.

Four styles of hoppers are available for use with these planters. By selecting the proper hopper and the seed plates to go with it, a great variety of seeds may be handled, including cotton (partially delinted, semi-delinted or fully delinted), field corn, sweet corn, pop corn, kaffir corn, broom corn, beets, beans, peas, sunflower, melon, cucumber, peanuts (shelled or in the shell) and many others. The function and purpose of these hoppers is explained elsewhere in this manual.

The selection of seed and seed plates requires special care. Best results are obtained when the seed is clean and graded to uniform size and type. See that the seed plate used is the proper thickness and that the cells are the proper size to chamber the seed.

When selecting hoppers, consideration should be given to the kind of seed and the varieties to be planted. The Single Seed Hopper, when equipped with the proper plates, will handle all varieties of cotton seed as well as many varieties of corn, beans and peanuts. When a two-compartment hopper is desired, the No. 23 Corn and Pea Attachment may be obtained, the hopper being mounted on the same hopper bracket as the Single Seed Hopper.

The "POAX" Reverse Feed Cotton Hopper is adaptable to plant corn, beans and peas by using corn equipment. When a two-compartment hopper is desired, the Type "C" Duplex Hopper may be obtained, the hopper being mounted on the same hopper bracket as the "POAX" Hopper.

The Type "C" Duplex Hopper is divided into two sections so that two kinds of seed may be handled and dropped separately or at the same time as desired. It is a great favorite with peanut growers because of its ability to handle peanuts, either shelled or in the shell, with accurate placement of the seed. When a hopper to handle cotton is desired, the "POAX" Reverse Feed Cotton Hopper may be obtained, the hopper being mounted on the same hopper bracket as the Duplex Hopper.

The Richmond Corn Hopper is especially recommended for the corn grower. Seed plates are available for nearly all varieties of hybrid corn and many other seeds as well. A list of seeds handled by this hopper is covered elsewhere in this manual. When a two-compartment hopper is desired, the No. 27 Corn and Pea Hopper may be obtained, the hopper being mounted on the same hopper bracket as the corn hopper.

Approximate planting distances when using 16-cell corn plates are 11", 14", 15", 19" and 25" apart as regularly equipped. Variations in spacings, with a given seed plate, are obtained by the arrangement of the sprockets on the countershaft and feed shaft. A table of planting distances for other seeds and seed plates will be found in this manual.

Fertilizer Units, for placing a band of fertilizer beside the seed row while planting, may be obtained for use with these planters. When flat planting with the runner planter, the fertilizer is deposited behind a disk opener or shovel opener in front of the runner and slightly to one side of the seed row. When used with the blackland planter, the flow of the fertilizer is directed back of the sweep where it is mixed with the soil by the action of the opener and covering shovels.

The fertilizer delivery assembly is the same for both planters and for side dressing with the Cub-144 Cotton and Corn Cultivator. It includes the hopper and mounting bracket and when fertilizing beside the crop row, the planter drive mechanism is left in place and the seed hopper, seed tube and ground unit are removed.

The hopper is the star feed type with a fingered feed wheel which revolves in the hopper bottom carrying the fertilizer under an adjustable gate to the discharge opening.

The quantity of fertilizer sown is regulated by a lever outside the hopper which controls the gate opening. Two extra feed wheels may be obtained on special order. These increase the range of distribution so that from 56 to 940 pounds per acre may be sown by the use of the quantity lever and by changing feed wheels. The regular feed wheel will sow from 140 to 680 pounds per acre. These figures are based on average commercial fertilizer and rows spaced 42" apart.

The Fertilizer Units are further explained in the Owner's Manual furnished with the unit.

The Cub-171 One-Row Blackland Planter (sweep type) is designed to plant crops on beds spaced 36" to 42" apart. The planter includes the hopper mounting and drive mechanism and a ground unit for a sweep, opener shovel and two covering shovels. Sweeps are ordered according to the size desired with a choice ranging from 14" to 26". The 16", 18", 20" and 22" sweeps may be obtained drilled for extension wings. Hoppers are ordered, as desired, from the four styles available. To meet the requirements imposed by various soil conditions, special equipment and attachments are available as follows:

Spring Trip Covering Shovel Shanks for use in rooty or rocky soils.

Disk Coverers for use in trashy conditions or where greater seed coverage is required.

Press Wheel Attachment to press the soil around the seed to hold the moisture.

Cultivating Attachment often desired to remove weeds growing along the sides of the beds at the time of planting.

The Cub-172 One-Row Runner Planter is designed to plant crops in rows spaced 36" to 48" apart. The planter includes the hopper mounting and drive mechanism and a ground unit with runner and adjustable press wheel. Hoppers are ordered as desired from the four styles available.

The ground unit is the hinged flexible type designed so the runner will float independently of any other ground working tools. When either bedding or furrowing and hard or difficult soil conditions are encountered, the runner and press wheel maintain the desired planting depth.

To meet conditions imposed by various soil conditions, special equipment and attachments are available as follows:

Runner Wings and Dirt Shields, to sweep off the top of beds.

Gauge Shoe Attachment, used when more accurate depth control is required in loose sandy soil.

Marker Attachment (Shoe Type), for use when flat planting or where the tractor wheel tread is different from the rows being planted.

Bedding Attachment, for planting on beds.

Furrowing Attachment, for planting in furrows. A 5" straight shovel is furnished with this attachment.

The Combination Disk Bedding and Shovel Furrowing Attachment may be obtained for performing either the bedding or the furrowing operation.

You are urged to consult your International Harvester Dealer concerning special planting problems, the type of hopper to be used with the crops being planted and seed plates to match the seed. Equipment is available for your planter to plant nearly every seed commonly planted in rows. Within the International Harvester Company are men who have spent years in research and study of planting problems. Let the experience of these men serve you.

Be sure to read the Instructions for Adjusting and Operating in this manual. Check each item referred to and acquaint yourself with the adjustments required to do a good planting job and to get maximum trouble-free service from your machine.

Remember, a planter properly lubricated and adjusted saves time, labor and fuel costs.

INSTRUCTIONS FOR ADJUSTING AND OPERATING

(Setting Up instructions are on page 19.)

LUBRICATION

Use the pressure lubrication gun furnished with the tractor and keep all bearings and working parts well lubricated.

Lubrication fittings are provided in the following places:

One 67-1/2° fitting	In press wheel hub (Cub-172 Series).
One straight fitting	In 7-tooth sprocket on countershaft.
Two straight fittings	In countershaft bearings.
Two straight fittings	In 7-tooth idler sprockets.
Two 67-1/2° fittings	In feed shaft bearings.

SEED MECHANISM

Use kerosene or paraffin oil to cut the paint on the seed mechanism so that the parts will work freely.

Use nothing but kerosene or paraffin oil on the seed mechanism.

GENERAL

It is recommended that the rear tractor wheels be equipped with either 7-24" or 8-24" pneumatic tires for maximum traction and ground clearance when the planter is in the raised position; however, 6-24" tires can be used.

WIDTH OF ROWS

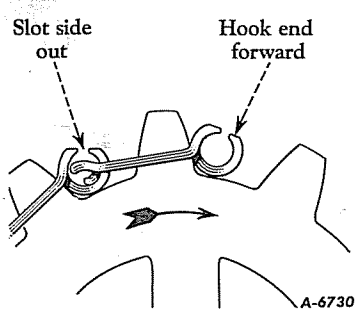
The Cub-171 Blackland Planter is designed to plant 36" to 42" rows. The Cub-172 Runner Planter is designed to plant 36" to 48" rows.

CHAINS

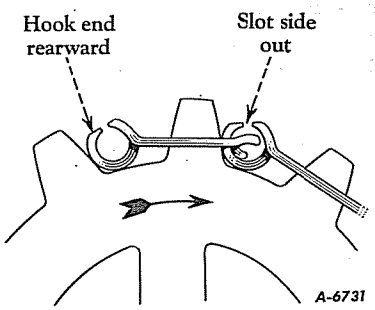
Place the chains on the sprockets as shown in Illusts. 1 and 2 according to the size of the drive sprocket in relation to the size of the sprocket to be driven.

When the drive sprocket is larger than the driven sprocket, the chain should be placed on the sprockets *as shown in Illust. 1.*

When the drive sprocket is smaller than the driven sprocket, the chain should be placed on the sprockets *as shown in Illust. 2.*



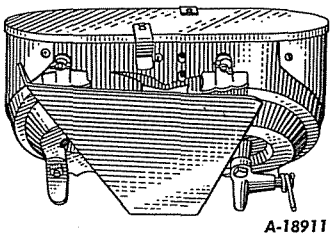
Illust. 1



Illust. 2

To detach the chain, bend to the coupling position and strike light blows.

TYPE "C" DUPLEX HOPPER



Illust. 3

This hopper is divided into two sections to permit planting two kinds of seed at the same time such as corn and beans, either alternating drop or both at the same time. The same seed can be used in both sections to be planted twice as thick. When desired, it is possible to use only one section. Seed plates are available to plant almost any kind of seed with the exception of cotton.

To drop seeds from both sections of the Duplex Hopper alternately, adjust the 16-tooth ring gear and seed plate so that a cell in one plate is over the discharge opening, and so the discharge opening in the other plate is midway between two cells.

To drop seeds from both sections of the Duplex Hopper at the same time, adjust the 16-tooth ring gear and seed plate so the cells in both plates reach the discharge opening at the same time.

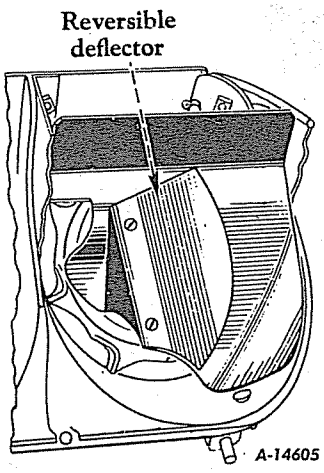
There are three driving gears furnished with this hopper, a 7-tooth, a 9-tooth and a 12-tooth. With the use of the different gears and plates with different number of seed cells, seeds can be droppped almost any distance apart in the row. The driving gears each have four driving lugs which fit into holes in the face gear on the planter and are held in place by means of a 3/8" machine bolt which screws into the face gear.

TABLE OF PLANTING DISTANCES

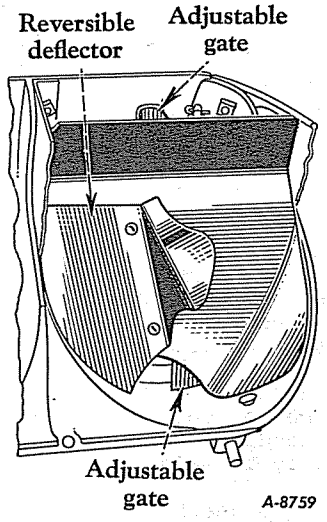
	Using one side or both sides dropping together						Alternating, using both sides of hopper					
	Driving Gear						Driving Gear					
	Regular			Special			Regular			Special		
	12 Cog	9 Cog	7 Cog	16 Cog	10 Cog	6 Cog	12 Cog	9 Cog	7 Cog	16 Cog	10 Cog	6 Cog
2-cell plate	48"	64"	82"	36"	58"	96"	24"	32"	41"	18"	29"	48"
3-cell plate	32"	42"	55"	24"	39"	64"	16"	21"	27½"	12"	19½"	32"
4-cell plate	24"	32"	41"	18"	29"	48"	12"	16"	20½"	9"	14½"	24"
8-cell plate	12"	16"	20½"	9"	14½"	24"	6"	8"	10¼"	4½"	7¼"	12"
12-cell plate	8"	11"	14"	6"	10"	16"	4"	5½"	7"	3"	5"	8"
24-cell plate	4"	5½"	7"	3"	5"	8"	2"	2¾"	3½"	1½"	2½"	4"
36-cell plate	2¾"	3¾"	4½"	2"	3⅓"	5½"	1½"	1¾"	2¼"	1"	2"	2¾"
40-cell plate	2½"	3"	4"	1¾"	2¾"	5"	...	...	...	...	...	...

Planting distances are approximate and are based on tractors having 7-24" tires on the rear wheels. When using 6-24" tires, planting distances are decreased 5%; with 9-24" tires planting distances are increased 5%.

TYPE "C" DUPLEX HOPPER - Continued



Illust. 4



Illust. 5

The seed deflector is reversible. For planting peanuts in the shell, the reversible deflector should be placed in the position *shown in Illust. 4.* For small seeds, place the reversible deflector in the position *shown in Illust. 5.*

When planting alternate rows of different seeds, close and tighten the shut-off valve at the discharge opening in the section of the hopper not planting. Also close the deflector opening in this section of the hopper with the adjustable gate, thereby preventing seeds entering the seed plate chamber and building up over the discharge opening.

The adjustable gate is used also to control the size of the deflector opening for different size seeds and for fast planting speeds, thus limiting the amount of seed entering the seed plate chamber and preventing seeds building up too high on the seed plate.

NOTE: The gate should always be wide open when the deflector is placed *as shown in Illust. 4.*

When using both sides of the Duplex Hopper to plant seeds alternately in the row, more accurate spacing can be obtained by using the right side of the hopper for irregular shaped seeds (such as corn) and the left side of the hopper for smooth round shaped seeds (such as peas, beans, etc.)

SEED PLATES

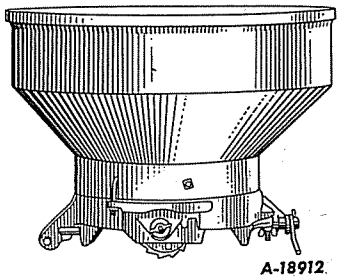
Part Number of seed Plate	Number of Cells	Seeds per Cell	Typical Seed
R 7016	4	5-7	Beans-Biloxi Soy
CPB 5151	8	1	Biloxi Soy
CPB 5017	24	1	Biloxi Soy
CP 5197	40	1	Bountiful
R 7038	40	1	Bountiful
R 7039	40	1	Bountiful
R 7040	40	1	Bountiful
CP 5194	12	1	Fordhook Lima
R 7036	16	1	Fordhook Lima
R 7041	16	1	Fordhook Lima
CP 5197	40	1	Giant Stringless
CP 5195	12	2	Henderson Bush Lima
CP 5178	4	1	Laredo Soy
CPB 5017	24	1	Laredo Soy
CP 5193	8	3-4	Mammoth Yellow Soja
CP 5192	24	1	Mammoth Yellow Soja
CP 5196	24	2	Mung Soy
CPB 5150	8	1	O-Too-Tan-Soy
CPB 5140	2	1	Velvet (small)
CPB 5015	4	1	Velvet (small)
CPB 5149	4	1	Velvet (large)
CPB 5132	4	1	Corn -Hickory King
CPA 5166	8	1	Hickory King
CPB 5141	12	1	Kaffir, Sorghum,etc
CPB 5134	2	1	Large
CPB 5132	4	1	Large
R 7028	*	1	Large
CPA 5166	8	1	Large
CPB 5135	2	1	Small
CPC 5133	4	1	Small
CPC 5044	8	1	Small
R 7022	4	1	Small thin
CPB 5017	24	1	Crotalaria
CPB 5148	36	1	Cucumber.
CP 5197	40	4-5	Okra.
R 7000	8	1	Peanuts, Field, shelled
CP 5195	12	1	Field, shelled
R 7035	12	1	Field, shelled
R 7034	16	1	Field, shelled
R 7033	24	1	Field, shelled
CP 5167	8	1	Field, in shell
CP 5199	8	1	Jumbo, shelled
CP 5194	12	1	Jumbo, shelled
CPC 5144	3	1	Spanish, shelled
CPC 5147	8	1	Spanish, shelled
CPC 5014	12	1	Spanish, shelled
R 7032	12	1	Spanish, shelled
R 7029	16	1	Spanish, shelled
R 7031	24	1	Spanish, shelled
CPB 5013	8	1	Spanish, in shell
CP 5175	12	1	Spanish, in shell
CP 5198	18	4-5	Peas
CPB 5016	24	1	Peas
CP 5192	24	2	Peas-Austrian
CPB 5151	8	1	California Blackeye
CP 5198	18	3-4	Crowder
CP 5198	18	3-4	Little Marvel
CP 5198	18	4-5	Thos. Lexton
R 7027	4	4	Pepper Seed
CPB 5141	12	1	Sorghum, Kaffir Corn, etc.
R 7027	4	4	Tomato Seed
P 7030	8	1	Tung Nuts
CPB 5016	24	5	Vetch - Hairy

*4 Sets of Twin Cells.

NOTE: Seeds of any variety vary in size and shape and above selections are based on average seed. Best results are obtained by selecting the plate best suited to the seed used.

For table of planting distances, see page 5.

TYPE "POAX" REVERSE FEED HOPPER



Illust. 6

This hopper is for planting cotton; however, when so desired corn equipment can be obtained on special order.

To change from cotton to corn, loosen the thumb nut bolt on the bottom of the hopper and remove the cotton equipment. Attach the corn cut-off plate, using the carriage bolt and wing nut. Put the corn plate in the plate holder and put it in the hopper.

IMPORTANT! Assemble the seed plate with the numbered side away from the seed, making sure the notch in the plate engages the pin on the drive plate.

For planting beans, peas, etc. with the corn equipment, 5/16" thick plates can be obtained on special order. When using 5/16" thick plates, it is necessary that the reversible block (on the edge of the hopper bottom) be assembled in place with the notched side down. When using 5/32" thick plates, the notched side of the reversible block should be up.

The quantity of cotton planted is regulated by means of a thumb nut in the rear of the hopper which regulates a valve.

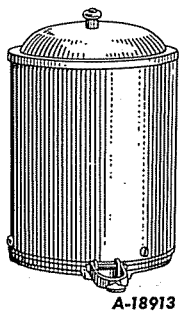
IMPORTANT! When placing the hopper on the planter, be sure the four lugs on the ring gear fit into the holes in the face gear and that no grit or dirt is under the ring gear as this will cause the planter to run hard.

SEED PLATES FOR USE WITH HOPPERS EQUIPPED WITH CORN EQUIPMENT (R 17108)

Part Number Of Seed Plate	No. of Cells	Size of Cells	Comparative Size of Cells	Seed per Cell	Typical Seed	Inches Apart in Row
CP 5111		Blank Plate - 5/32" thick (drilled as ordered)				
R 7015		Blank Plate - 5/16" thick (drilled as ordered)				
CP 5107	4	5/8" rd.	Medium	1	Corn.	18"
CP 5108	5	5/8" rd.	Medium	1	Corn.	14"
CP 5109	6	5/8" rd.	Medium	1	Corn.	12"
CP 5110	7	5/8" rd.	Medium	1	Corn.	10"
CP 5112	24	5/16" rd.	Small	1	Peas, Soy Beans . .	3"
CP 5113	24	3/8" rd.	Medium	1	Small Corn, Peas. .	3"
CP 5114	24	15/32" rd.	Medium	1	Small Corn.	3"
CP 5115	18	21/32 x 27/32"	Large	1	Lima Beans.	4"
CP 5116	6	3/8" rd.	Small	1	Small Corn.	12"
CP 5117	7	3/8" rd.	Small	1	Small Corn.	10"
CP 5118	8	3/8" rd.	Small	1	Small Corn.	9"
CP 5165	3	3/8" rd.	Small	1	Small Corn.	24"
R 7021	20	9/16 x 27/32"	Medium	1	Kidney Beans. . . .	3½"

Planting distances are approximate and are based on tractors having 7-24 tires on the rear wheels. When using 6-24" tires, planting distances are decreased 5%; with 9-24" tires planting distances are increased 5%.

RICHMOND CORN HOPPER



Illust. 7

This hopper is designed to plant accurately all varieties of corn and various other seeds such as peas, all kinds of beans, feed grains, etc. A large variety of seed plates and filler rings is available to suit most seed requirements. Spring catches are provided to hold the bottom plate in position to prevent spilling the seed on the ground when removing the hopper from the planter.

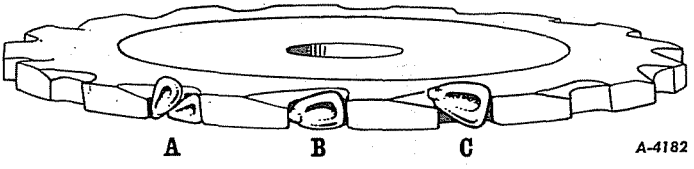
Additional sprockets are provided with the hopper to permit a change in planting distances as desired. The spacings possible with these sprockets are listed in the table below:

TABLE OF PLANTING DISTANCES

Cells in Seed Plate	Sprocket on Countershaft				
	510 943 R1 15 teeth	PO 2639B 12 teeth	510 943 R1 15 teeth	PO 2754 9 teeth	PO 2754 9 teeth
	Sprocket on Feed Shaft				
	PO 2754 9 teeth	PO 2754 9 teeth	PO 2639B 12 teeth	PO 2754 9 teeth	PO 2639B 12 teeth
8	22"	28"	30"	38"	50"
10	17-1/2"	22-3/4"	24"	30"	40"
12	15"	19"	20"	25"	33"
14	12-1/2"	16-1/4"	17"	21-1/2"	28-1/2"
16	11"	14"	15"	19"	25"
20	8-3/4"	11-1/4"	12"	15"	20"
22	8"	10-1/4"	11"	14"	18"
24	7-1/2"	9-1/2"	10"	12-1/2"	16-1/2"
29	6"	7-3/4"	8"	10"	13-1/2"
32	5-1/2"	7"	7-1/2"	9-1/2"	12-1/2"
34	5"	6-3/4"	7"	9"	11-3/4"
38	4-1/2"	6"	6-1/4"	8"	10-1/2"
40	4-1/4"	5-1/2"	6"	7-1/2"	10"
64	2-3/4"	3-1/2"	3-3/4"	4-3/4"	6-1/4"

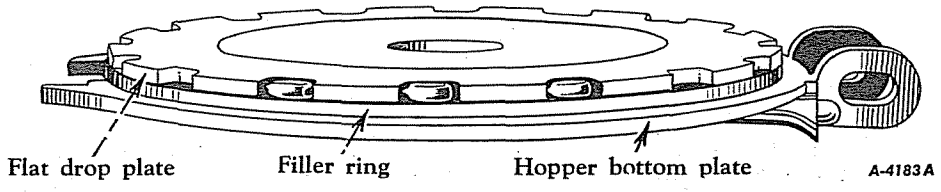
RICHMOND CORN HOPPER - Continued
SEED PLATES

NOTE: EDGE DROP, FLAT DROP, AND WHOLE HILL DROP PLATES ARE INTERCHANGEABLE.



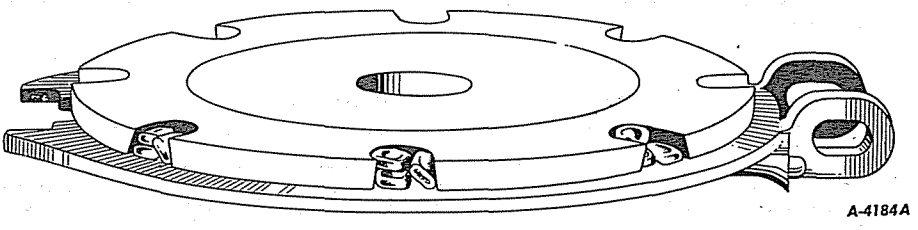
Illust. 8 - Edge Drop Plate.

Best results can be obtained only when the seed fits the cells in the plate like at "B". Imperfect chambering of seed, as at "A" and "C", results in irregular cropping. See list of seed plates.



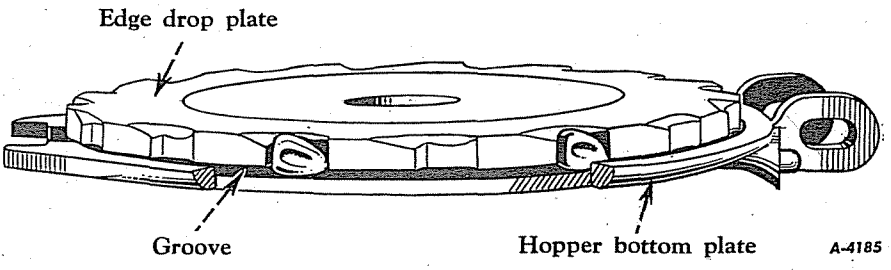
Illust. 9 - Flat Drop Plate.

Flat Drop Plates are interchangeable with Edge Drop Plates in the same seed cam. Flat Drop Plates require a filler ring in most cases. See list of seed plates and dropping distances.



Illust. 10 - Whole Hill Drop Plate.

Whole Hill Drop Plates are preferred in some cases and can be used without changing the planter in any way. See list of seed plates.



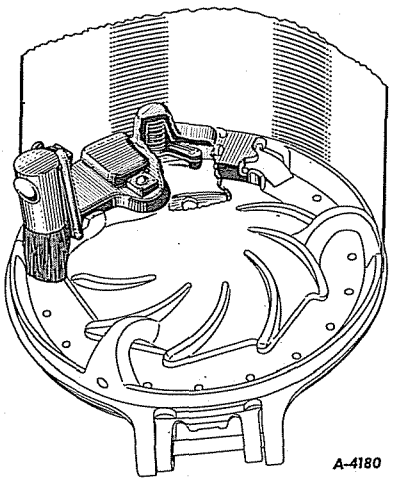
Illust. 11 - Grooved Hopper Bottom Plate (Special).

Grooved Hopper Bottom Plates (620 369 R11) can be substituted for the regular hopper bottom plate for handling extra-wide grains with the Edge Drop Plates. The above illustration shows the hopper bottom plate with a portion of the rim broken away to show the groove. This groove has the effect of increasing the depth of the seed cell.

RICHMOND CORN HOPPER - Continued
BRUSH CUT-OFF (Special)

The brush cut-off is recommended for planting the more tender seeds as the brush is less liable to break the seed. It is also recommended for use with any seed so small that it could wedge around the metal cut-offs causing them to bind.

To substitute the brush cut-off it is well to remove the seed can from the bracket. Be sure the knock-out pawl spring is properly seated to make the pawl operate freely, and that the brush is adjusted to rest lightly on the seed plate before tightening the bolt.



Illust. 12

Hopper cut away to show brush cut-off substituted for the regular metal cut-off in seed hopper.

SPECIAL HILL DROP PLATES

A Filler Ring is required for use with all Seed Plates less than 5/16" thick. See below.

Part Number of Seed Plate	No. of Cells	Size of Cells	Comparative Size of Cells	Typical Seed	Seeds per Cell
1892 A	8	19/32" dia.	Medium	Corn	2 and 3
1893 A	8	21/32" dia.	Large	Corn	2 and 3
3082 A	8	17/32" dia.	Small	Corn	2 and 3
3083 A	8	15/32" dia.	Special Small	Corn	2 and 3
3328 A	8	7/16" dia.	Special Small	Very Small Hybrid Corn	2 and 3
†3445 A	8	1/4" dia.	Large	Tomato Seed	. . . .
†3446 A	8	7/32" dia.	Medium	Tomato Seed	. . . .

†Special Filler Ring (3447AA) and Special Knocker (3460A) used with these plates.

Planting distances are approximate and are based on tractors having 7-24" tires on the rear wheels. When using 6-24" tires, planting distances are decreased 3%; with 9-24" tires planting distances are increased 5%.

For table of planting distances, see page 9.

SEED PLATES (FLAT DROP)

All flat drop plates listed below may be used for drilling.

A Filler Ring is required for use with all Flat Drop Seed Plates. See below.

Part Number of Seed Plate	No. of Cells	Size of Cells	Comparative Size of Cells	Typical Seed
1852 AA	Blank plate, 3/16" thick (drilled as ordered).			
§3099 A	Blank plate, 9/64" thick (drilled as ordered).			
*3544 A	Blank plate, 1/8" thick (drilled as ordered).			
620 051 R1	Blank plate, 1/4" thick (drilled as ordered).			
1964 A	8	11/16 x 1/2"	Large	Short Flat Corn.
1965 A	8	5/8 x 1/2"	Medium	Short Flat Corn.
1966 A	8	9/16" dia.	Small	Round Flat Corn.
1968 A	8	13/32 x 1/4"	Small	Soy Beans (1 bean).
1969 A	8	3/4 x 5/16"	Medium	Soy Beans (2 beans).
3075 A	8	3/4" dia.	Extra Large	Round Flat Corn.
3076 A	8	Twin Cells each 11/32" dia.	. . . . .	Peas (Memphis).
3085 A	8	3/8 x 9/32"	Medium	Soy Beans, Peas, Beets.
3086 A	12	3/8 x 9/32"	Medium	Soy Beans, Peas, Beets.
3351 AA	12	7/16" dia.	Small	Corn (Flat Rd. Hybrid).
1898 A	14	9/16" dia.	Small	Round Flat Corn.
1899 A	14	3/4" dia.	Large.	Round Flat Corn.
1794 A	16	5/8 x 5/16".	Small	Corn, Hybrid Corn.
1795 A	16	5/8 x 13/32" x 3/8"	Medium	Corn.
1796 A	16	11/16 x 7/16" x 13/32"	Large	Corn.
1853 A	16	3/8 x 7/32"	Medium	Pop Corn.
1854 AA	16	3/8 x 9/32"	Medium	Beet and Bean.
1855 A	16	1/2 x 3/8"	Small	Short Flat Corn, Hybrid Corn.
1856 A	16	19/32 x 7/16"	Medium	Short Flat Corn.
1857 A	16	11/16 x 1/2"	Large	Short Flat Corn.
1901 A	16	1/4" dia.	Medium	Kaffir and Small Seeds.
†1903 A	16	1/2 x 5/32"	Medium	Melon and Cucumber Seeds.
1927 A	16	3/4" dia.	Extra Large	Round Flat Corn.

1928 A	16	5/8" dia.	Medium	Round Flat Corn.
1938 A	16	17/32" dia.	Small	Round Flat Corn.
§3001 A	16	9/16 x 3/16"	Small	Country Gentleman Corn.
§3002 A	16	5/8 x 7/32"	Large	Country Gentleman Corn.
3050 A	16	21/32 x 5/16"	Small	Horse Tooth Corn.
3051 A	16	23/32 x 11/32"	Medium	Horse Tooth Corn.
3052 A	16	13/16 x 3/8"	Large	Horse Tooth Corn.
†3143 A	16	5/8 x 5/16"	. . . .	Sunflower.
3214 A	16	7/16 x 9/32"	. . . .	Blackeye Beans.
§3225 A	16	5/8 x 15/64"	Large	Country Gentleman Corn.
3266 A	16	15/32 x 3/8"	. . . .	Corn, Pea, Bean and Hybrid Corn.
3303 A	16	7/16 x 7/32"	Extra Small	Hybrid Corn (Small Tip Kernel).
3321 A	16	17/32 x 9/32"	Medium	Hybrid Corn (Thin Flat).
3329 A	16	7/16 x 11/32"	Special Small	Round Flat Corn, Hybrid Corn.
3330 AA	16	1/2 x 7/16"	Small	Round Flat Corn, Hybrid Corn.
3350 AA	16	7/16" dia.	Small	Corn (Flat Rd. Hybrid).
3365 A	16	13/32" dia.	Extra Small	Corn (Flat Rd. Hybrid).
3419 A	16	37/64 x 5/16"	Small	Corn (Flat Hybrid).
1967 A	20	5/32" dia.	. . . .	Sorghum.
1930 A	24	17/32 x 1/4"	. . . .	Beet Seed.
1931 A	24	19/32 x 5/16"	. . . .	Bean.
3087 A	24	19/32 x 7/16"	Medium	Short Flat Corn.
3088 A	24	11/16 x 1/2"	Large	Short Flat Corn.
†3109 A	24	1/4 x 1/8"	Small	Kaffir Corn.
1929 A	32	13/32 x 5/16"	Medium	Pea Bean.
●3168 A	32	1/4 x 7/64"	. . . .	Broom Corn.
●3169 A	64	1/4 x 7/64"	. . . .	Broom Corn.
◆3559 A	40	3/16" dia.	Small	Sorghum.

†Special Filler Ring (1902 AA - 5/32" thick) used with these plates.

§Special Filler Ring (3000 A - 11/64" thick) used with these plates.

●Special Filler Ring (3167 AB - 13/64" thick) used with these plates.

◆Special Filler Ring (3447 AA) and Special Knocker (3460 A) used with this plate.
Recommend Special Brush Cut-off (2250 A) and Special Pawl Cap (3013 A).

*Special Filler Ring (3447 AA - 13/64" thick) used with this plate.
All other flat drop plates take regular Filler Ring (13870 A - 18" thick).

Planting distances are approximate and are based on tractors having 7-24" tires on the rear wheels. When using 6-24" tires, planting distances are decreased 5%; with 9-24" tires planting distances are increased 5%.

For table of planting distances, see page 9.

SEED PLATES (EDGE DROP)

All edge drop plates are 5/16" thick. No filler ring is used with these plates.

Part Number of Seed Plate	No. of Cells	Size of Cells	Comparative Size of Cells.	Typical Seed
3045 AA	Blank plate - 5/16" thick		(drilled as ordered).	
1961 A	8	9/16 x 3/16"	Small	Corn.
1962 A	8	5/8 x 3/16"	Medium	Corn.
1963 A	8	11/16 x 13/64"	Large	Corn.
3215 A	8	15/16 x 21/32"	. . .	Lima Beans.
3229 A	8	1-1/4 x 13/16"	Extra Large	Mexican Beans.
3353 A	8	1/2 x 1/4"	Small	Corn (Thick).
1972 A	12	1 x 11/16"	Large	Mexican Beans.
3091 A	12	5/8 x 3/16"	Medium	Corn.
3092 A	12	11/16 x 13/64"	Large	Corn.
3352 A	12	1/2 x 1/4"	Small	Corn (Thick).
1891 A	16	7/8 x 1/2"	. . . .	Beans.
1975 A	16	15/32 x 3/16"	Special Small	Corn, Hybrid Corn.
1977 A	16	9/16 x 3/16"	Small	Corn.
1978 A	16	5/8 x 3/16"	Medium	Corn.
1979 A	16	11/16 x 13/64"	Large	Corn.
3042 A	16	1/2 x 3/8"	. . . .	Nova Scotia Marrow Beans, Hybrid Corn.
3056 A	16	25/32 x 7/32"	Extra Large	Corn.
3058 A	16	11/16 x 1/2"	Medium	Kidney Beans.
3059 A	16	13/16 x 1/4"	Large	Kidney Beans.
3104 A	16	33/64" dia.	. . . .	Beans.
3106 A	16	21/32" dia.	. . . .	Lima Beans.
3142 A	16	3/4 x 5/8"	. . . .	Kidney Beans.
3171 A	16	9/16 x 11/64"	Small Narrow	Corn.
3172 A	16	5/8 x 11/64"	Medium Narrow	Corn.
3236 A	16	7/16 x 3/16"	Small	Sweet Corn.

3237 AA	16	1/2 x 1/4"	Medium	Sweet Corn.
†3313 A	16	15/32 x 9/32"	Medium	Hybrid Sweet Corn (Thick).
†3314 A	16	7/16 x 1/4"	Small	Hybrid Sweet Corn (Thick).
3324 A	16	15/32 x 5/16"	Medium	Hybrid Corn (Spherical Butts).
3331 A	16	15/32 x 3/8"	Medium	Hybrid Corn (Round Butts).
3354 A	16	3/4 x 3/8"	. . . .	Peanuts.
3366 A	16	15/32 x 7/32"	Medium	Hybrid Corn (Short, Thick, Flat).
3367 A	16	15/32 x 11/64"	Extra Small	Hybrid Corn (Thin, Flat).
†3398 A	16	15/32 x 5/16	Medium	Hybrid Corn (Round).
†621 036 R1	16	15/32 x 5/16"	Small	Hybrid Corn (Long Round).
*3561 A	16	1/2 x 19/32"	Medium	Hybrid Corn (Long Round).
*3613 A	16	19/32 x 11/32"	Large	Hybrid Corn (Long Round)
3545 A	16	9/16 x 11/64"	Small	Corn (Thin, Narrow).
3546 A	16	33/64 x 3/16"	Extra Small	Corn (Narrow).
3547 A	16	17/32 x 11/64"	Extra Small	Corn (Thin, Narrow).
3355 A	20	3/4 x 3/8"	. . . .	Peanuts.
3127 A	22	27/32 x 23/32"	. . . .	Peas.
3043 A	24	1/2 x 3/8"	Medium	Nova Scotia Marrow Beans.
3097 A	24	3/4 x 5/16"	Medium	Kidney Beans.
3098 A	24	7/8 x 5/16"	Large	Kidney Beans.
3114 AA	24	21/32 x 13/32"	Large	Marrow Beans.
1926 A	29	5/8 x 9/32"	Medium	Ensilage.
†3302 A	29	5/8 x 9/32"	. . . .	Beans.
†3638 A	40	1/4 x 11/16"	Medium	Soy Beans.
●3301 A	34	5/8 x 7/16"	. . . .	Large Soy Beans, Peas (2 seeds).
3331 A	38	7/16 x 3/8"	. . . .	Peas.

● 9/32" thick - Brush cut-off recommended (see above).

† 1/4" thick (see above).

*5/16" thick (see above).

Planting distances are approximate and are based on tractors having 7-24" tires on the rear wheels. When using 6-24" tires, planting distances are decreased 5%; with 9-24" tires planting distances are increased 5%.

For table of planting distances, see page 9.

SEED PLATES (FLAT DROP)

Plates listed below are used for drilling only.

Part Number of Seed Plate	No. of Cells	Size of Cells	Comparative Size of Cells	Seed per Cell	Typical Seed	Inches Apart in Row
NO. 7937		Blank Plate - 5/32" thick(drilled as ordered) (used with Single Seed Bottom Plate PO 1821A)				
PO 1980		Blank Plate - 5/32" thick (drilled as ordered) (used with Auxiliary Bottom Plate PO 1978)				
PO 1746		Blank Plate - 9/32" thick (drilled as ordered) (used with PO 1731 Cut-off Plate and PO 1821A Bottom Plate)				
PO 2965	3	5/8" dia.	Medium	1	Corn.	32"
NO. 7932	4	5/8" dia.	Medium	1	Corn.	24"
NO. 7933	5	5/8" dia.	Medium	1	Corn.	19-1/4"
NO. 7934	6	5/8" dia.	Medium	1	Corn.	16"
NO. 7935	7	5/8" dia.	Medium	1	Corn.	13-3/4"
NO. 7952	8	5/8" dia.	Medium	1	Corn.	12"
PO 1979	10	3/16"	Small	1	Kaffir Corn . . .	9-1/2"
NO. 7936	12	3/16"	Small	1	Kaffir Corn . . .	8"
PO 1017	6	3/8 rd.	Medium	1	Peas.	16"
PO 1018	7	3/8 rd.	Medium	1	Peas.	13-3/4"
PO 1019	8	3/8 rd.	Medium	1	Peas.	12"
PO 1700A	14	. . . . .	. . . .	1	Peanuts in Shell.	6-3/4"
PO 1910	8	. . . . .	. . . .	1	Peanuts in Shell.	12"
PO 1911	9	. . . . .	. . . .	1	Peanuts in Shell.	10-1/2"
PO 1912	10	15/32"	. . . .	1	Peanuts Shelled .	9-1/2"
PO 2788	12	15/32"	. . . .	1	Peanuts Shelled .	8"

PO 2789	14	15/32"	. . . .	1	Peanuts Shelled .	6-3/4"
PO 1729	18	3/4" dia. (9/32" thick)	Large	1	Beans	5-1/4"
PO 1730	20	3/4 x 1/2" (9/32" thick)	Large	1	Beans	4-3/4"
PO 2937	13	9/32 x 1/2" (9/32" thick)	. . . .	1 & 2	Cotton.	7-1/2" 10 lbs. per acre.
PO 378A	20	9/32 x 1/2 (9/32" thick)	. . . .	1 & 2	Cotton.	5" 14 lbs. per acre.
PO 2786	26	9/32 x 1/2" (9/32" thick)	. . . .	1 & 2	Cotton.	3-3/4" 20 lbs. per acre.
NO. 7980A	32	5/16 x 1/2" (9/32" thick)	. . . .	2	Cotton.	3" 20 lbs. per acre.
PO 1732	38	15/32 x 33/64" (9/32" thick)	. . . .	3 & 4	Cotton.	2-1/2" 43 lbs. per acre.
NO. 7941A	42	5/16 x 7/16" (9/32" thick)	. . . .	2	Cotton.	2-1/4" 29 lbs. per acre.
PO 1816	19	19/32 x 1-3/32" (9/32" thick)	. . . .	. . .	Cotton.	5" 60-70 lbs. per acre.
PO 1817	13	19/32 x 1-3/32"	. . . .	. . .	Cotton.	7-1/2" 50-60 lbs. per acre.

Planting distances are approximate and are based on tractors having 7-24" tires on the rear wheels. When using 6-24" tires, planting distances are **decreased** 5%; with 9-24" tires planting distances are **increased** 5%.

PLANTING WITH RUNNER PLANTER (Flat Planting)

Two methods of spacing the rows are possible. The first does not require a marker and uses the wheel tracks of the tractor as a guide. To do this, set the tractor wheels to the same width as the rows to be planted; the 40" spacing probably being the most practical although 44" or 48" could be used. Begin to plant along the edge of the field and be sure this first row is straight. On the return pass across the field, line up the wheels on the side of the tractor next to the row previously planted so they will run in the tracks made by the same wheels during the first pass across the field. The remainder of the field is then planted in this manner. It will not be convenient to plant rows spaced different from the tractor wheel tread unless a marker is used.

The second method uses the Marker Attachment which is available on special order. Before beginning to plant, the markers must be adjusted to the row width to be planted. To do this, loosen the marker brace rods and marker pipe, measure from the planter runner to the right marker shoe and set it 3" less than the row width to be planted. Measure to the left marker shoe and set it 3" more than the row width. For instance, if planting 40" rows, set the right marker at 37" and the left marker at 43" from the runner. This is done because the drive sight is set 3" to the right of the center of the tractor.

After the markers are properly set, the lift chain clamps on the marker pipes are set so the markers may both be suspended about 1-1/2 feet off the ground (note that one marker will balance the other). In this position, the two chain stops are clamped one on each side of the chain guide *(see "H", Illust. 35)*. The chain stops serve to hold the markers in this position when turning at the ends of the field. When either marker is lowered, the stop will slip through the guide as the chain is pulled. When transporting the machine, raise both markers as high as they will go and hook the "S" hooks to the chain guide ring.

When using the marker, start to plant along one side of the field, then lower the marker to the ground on the side of the tractor next to the unplanted field. Proceed across the field using some means, such as a "flag", at the far end of the field to keep the row as straight as possible. As the first row is planted, a mark is made to be used as a guide for the next row.

Upon reaching the end of the field, raise the marker to the balanced position, turn around, line up the driving sight with the mark previously made, lower the marker on the side next to the unplanted field and make the next pass across the field. In this manner, plant the remainder of the field.

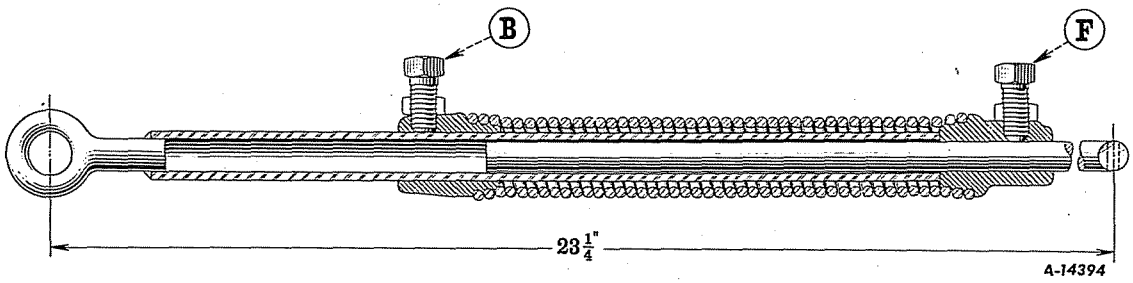
PLANTING ON BEDS

When planting on beds thrown up by a middle buster or bedder, some forethought should be given to the spacing of the beds and the tractor wheel tread to be used with the planter. Beds thrown up with 40" spacing are probably the most practical for the Cub planters, although 38" or 42" spacings may be used, depending on how the tractor is driven when planting.

When the tractor is set for the 40" wheel tread, the wheels will run in the center between the beds of 40" rows. If some other Cub implement is being used which requires the 44" tread (such as the direct-connected plow), the wheels may be left at this tread for convenience and the tractor driven so as to plant in the center of the bed. In this case, a 38" spacing or narrower would not be recommended although rows 40" or wider could be handled.

SAFETY FIRST: When planting in fields where beds have been thrown up, be sure to have weights on the tractor wheels or liquid in the tires or both. This is especially important if the wheel tread is set at 40".

PRESSURE SPRINGS



Illust. 13

To provide pressure on the ground equipment, raise the planter, loosen set screw "B" *(Illusts. 13, 17 and 18)*, stretch the spring "A" to give the desired tension and tighten the set screw securely.

INSTRUCTIONS FOR SETTING UP

(Adjusting and Operating Instructions are on page 4)

Remove all wires and arrange parts conveniently.

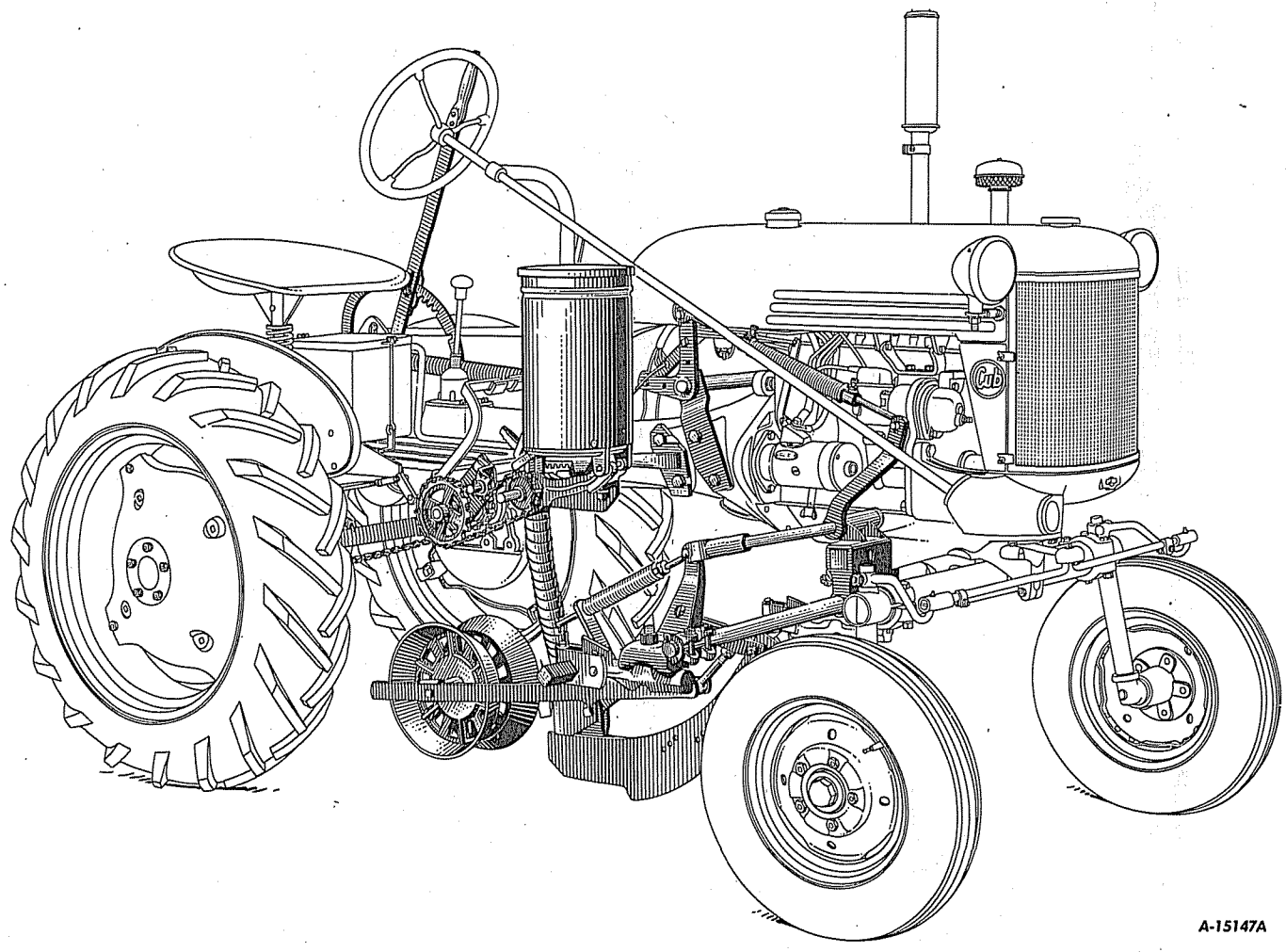
Lubricate all bearings and moving parts as you proceed, and see that they work freely.

Bolts must be used in the holes in which they are found, or in parts to which they are attached, unless otherwise shown.

Shaded portions in the illustrations show parts to be assembled; these must be placed on the machine in the order numbered.

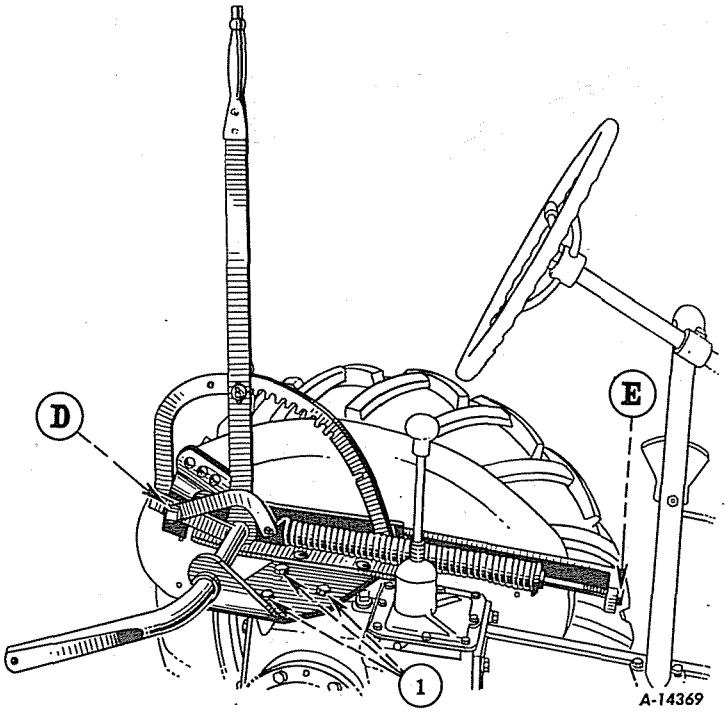
Wherever the terms "left" and "right" are used, it should be understood to mean from a position behind and facing the machine.

We reserve the right to make changes or improvements in the design or construction of any part without incurring the obligations to install such changes on any machine previously delivered.



Cub-172 One-Row Runner Planter (Manual Control).

MASTER CONTROL LEVER (Manual Control)



Illust. 14

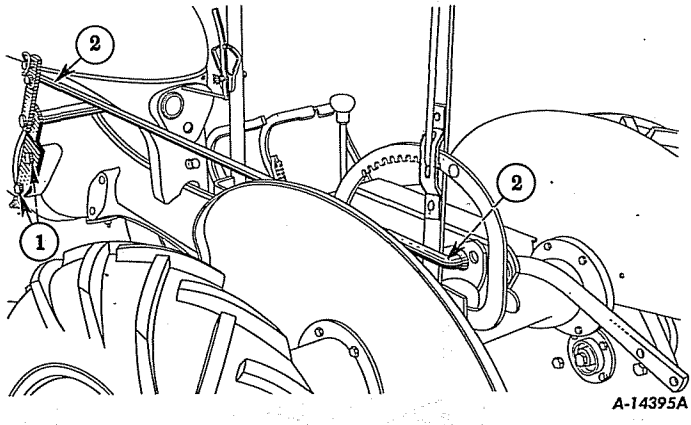
1. Bolt the lever unit to the transmission case with three cap screws.

For greater ease when lowering the planter to the proper depth at the end of the row, set the bolt "D" in the bottom of the slot in the lift arm.

Balance the weight of the planter as desired by adjusting the spring tension at "E".

CAUTION! Whenever the implement is removed from the tractor, the master control lever must always be set in the FORWARD notch in the quadrant. If another implement is not to be attached, the tension of the counter-balancing spring should be relieved.

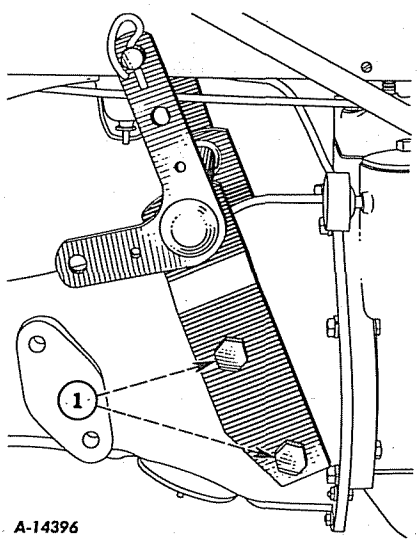
FRONT ROCKSHAFT (Manual Control)



Illust. 15

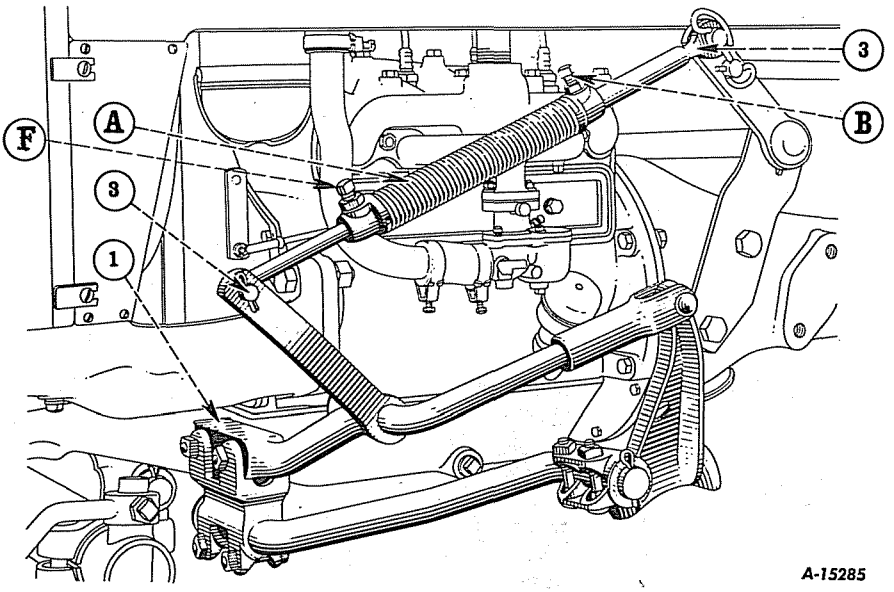
1. Bolt the rockshaft to the front attaching pad on the tractor clutch housing. Four special head cap screws are furnished for this purpose. *See Illust. 16 also.*

2. Attach the lift link to the lever and rockshaft *as shown in Illust. 15.*



Illust. 16

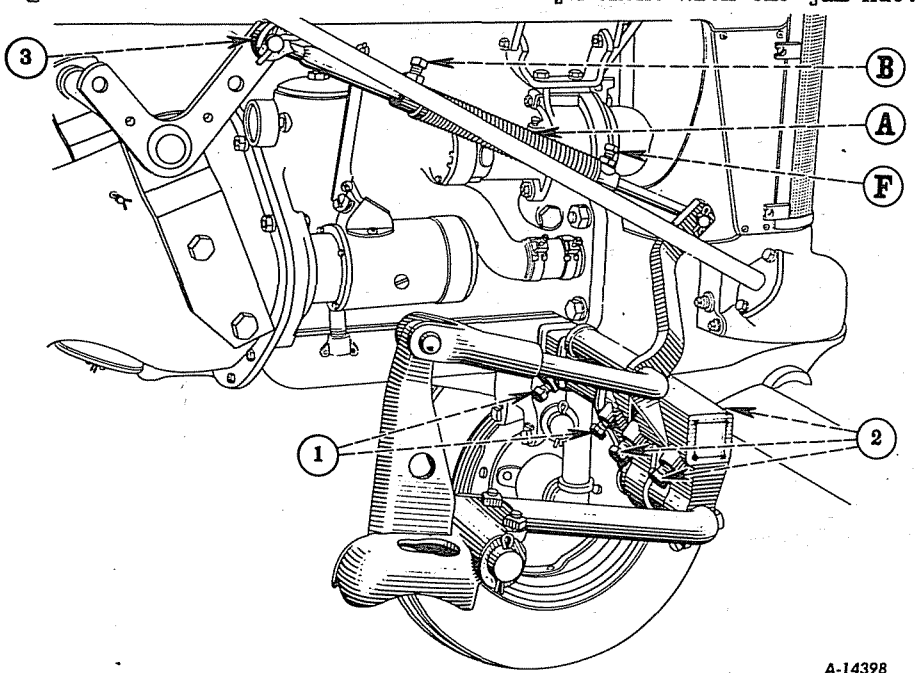
UNIVERSAL MOUNTING FRAME



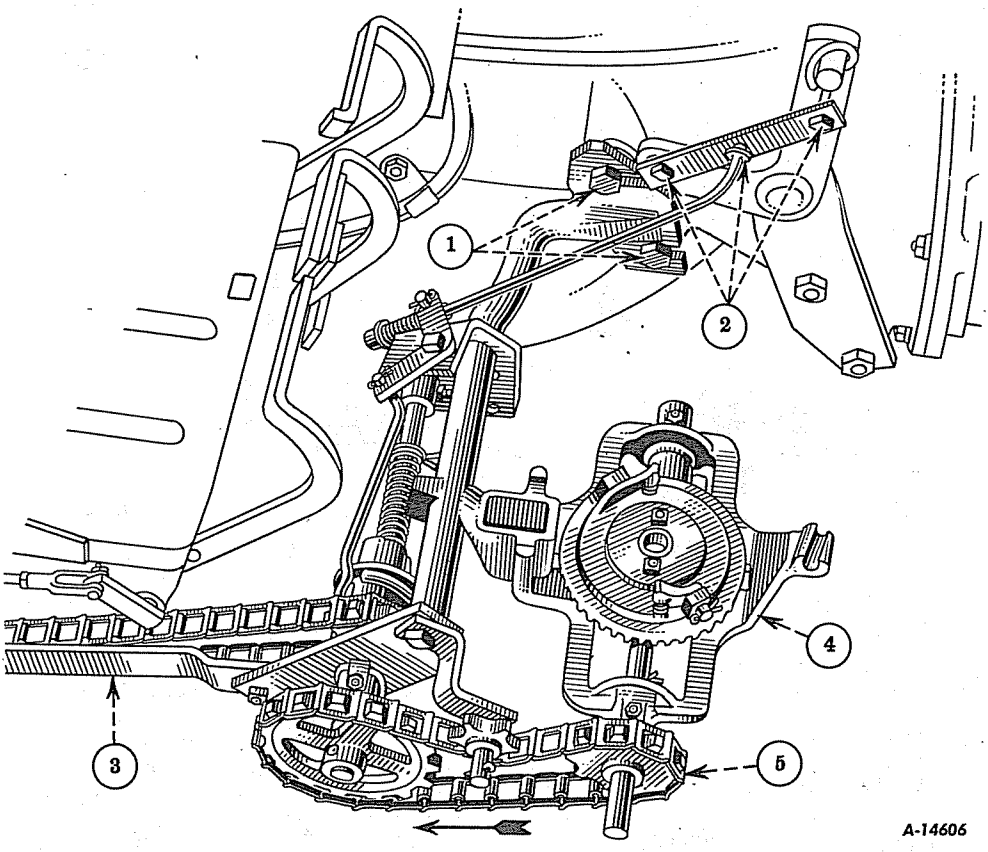
Illust. 17 - Left side of tractor.

1. Slide the left frame bar through the steering gear housing base and tighten the set screws.
2. Slide the right frame over the end of the left frame bar and tighten the set screws.
3. Attach the push rods to the lift arms and front rockshaft as shown.

CAUTION! Loosen the set screw "F" *(also see Illusts. 13, 17 and 18)* and extend the push pipe extension to measure 23-1/4", *as shown in Illust. 13.* Tighten the set screw and secure the adjustment with the jam nut.



Illust. 18 - Right side of tractor.



Illust. 19

Hopper bracket shown is for Richmond Corn Hopper. For other hopper brackets *see Illusts. 20 and 21.*

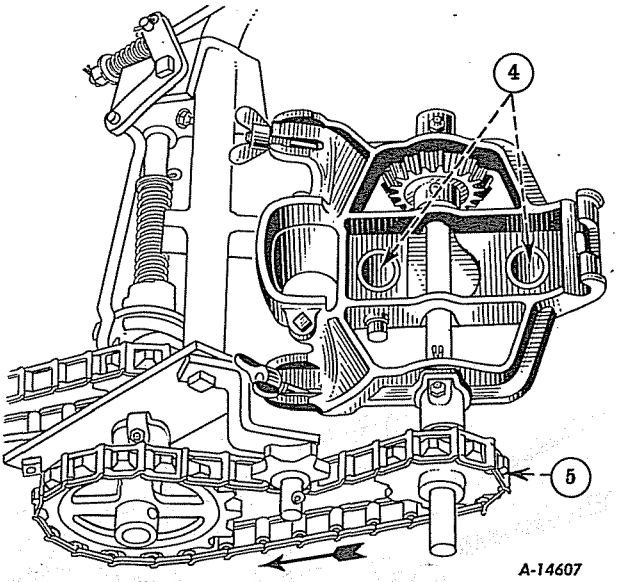
1. Attach the countershaft frame to the tractor as shown using the special hexagon head bolts furnished, and tighten securely.

2. Bolt the throw-out rod adapter to the rockshaft arms and connect the throw-out rod as shown.

3. Attach the countershaft frame brace to the rear axle housing with the special hexagon head bolts furnished. *Also see "H", Illust. 22.*

4. Bolt the hopper bracket to the countershaft frame. *Also see Illusts. 20 and 21.*

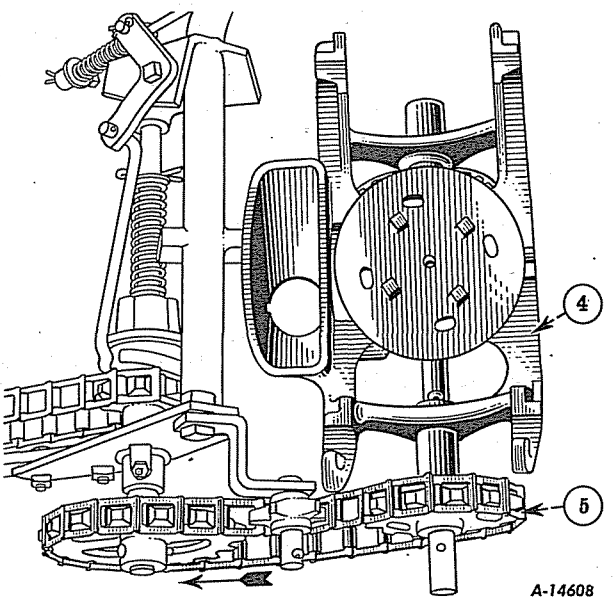
5. Put on the hopper drive chain. *Also see Illusts. 20 and 21* and paragraph "CHAINS" in the Adjusting and Operating Instructions.



Illust. 20

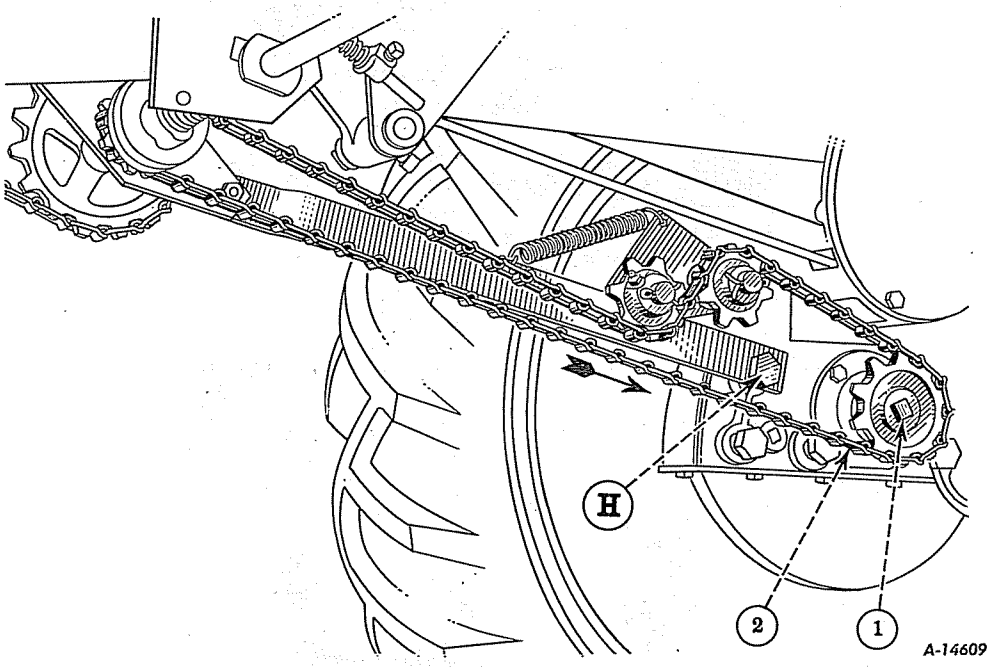
Hopper bracket shown is for Single Seed Hopper.

For instructions, refer to page 24.



Illust. 21

Hopper bracket shown is for Type "C" Duplex and Type "POAX" Reverse Feed Hoppers.

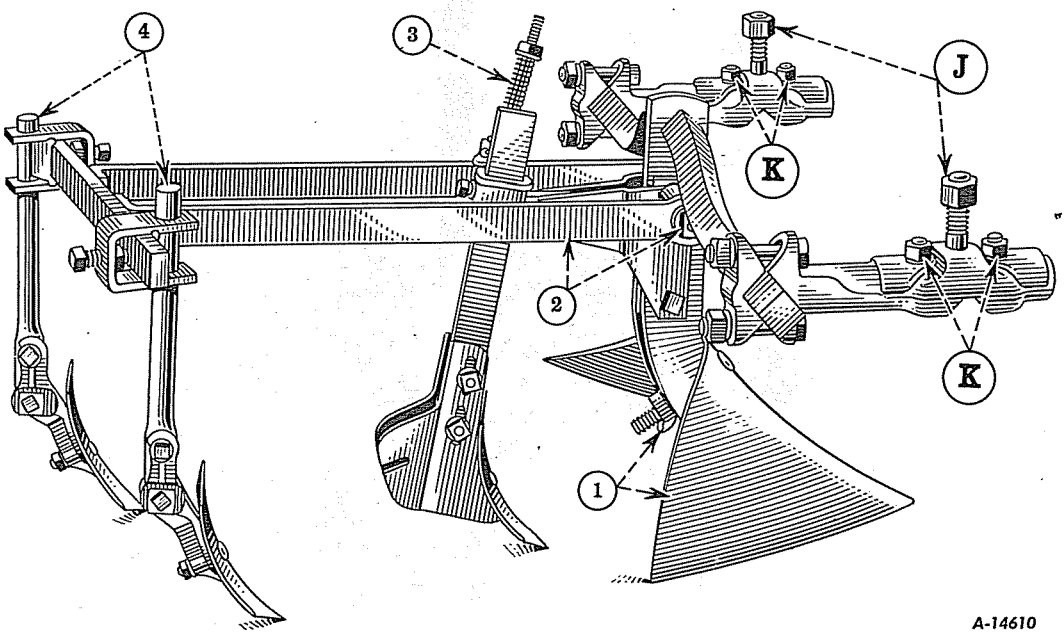


Illust. 22

1. Attach the seed plate drive sprocket to the tractor drive spindle with the machine bolt furnished.

2. Put on the main drive chains. Also see paragraph "CHAINS" in the Adjusting and Operating Instructions.

CUB-171 ONE-ROW BLACKLAND PLANTER



Illust. 23

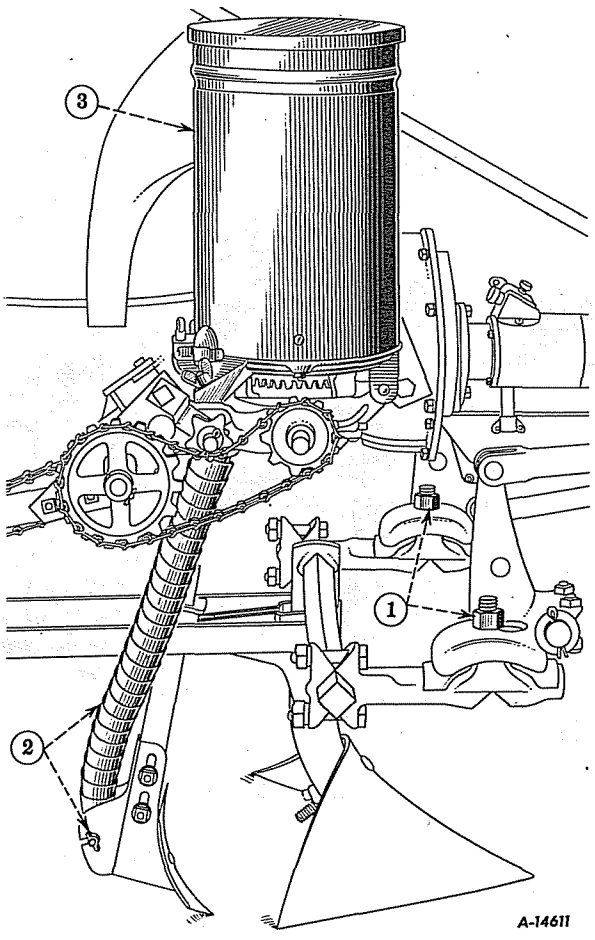
1. Attach the planter sweep to the sweep standard as shown.

2. Attach the covering frame to the opener standard brackets and bushings as shown.

3. Connect the spring pressure rod to the pressure spring pivot and secure with the cotter.

4. Secure the covering standards, complete with shovels, to the covering frame by means of the set screw clamps furnished.

5. Back off the special hexagon nuts "J" as shown.



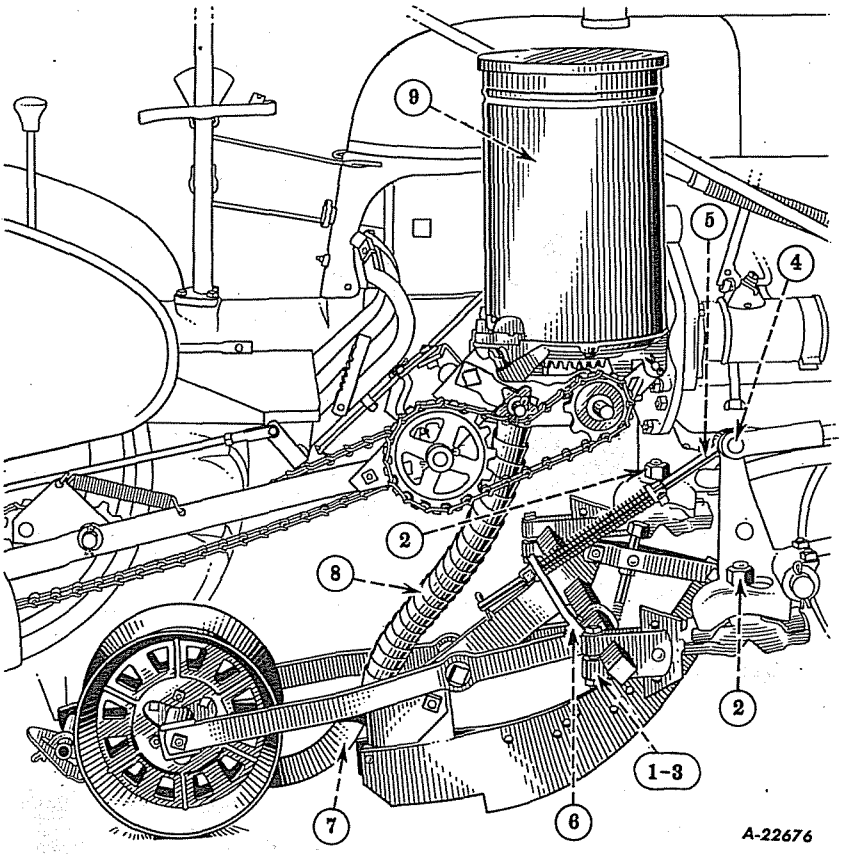
Illust. 24
Single Seed Hopper.

1. Slide the planter ground assembly under the tractor and attach it to the universal mounting frame as shown. Tighten the nuts securely.

2. Attach the seed tube to the hopper bracket and the opener shovel bracket as shown.

3. Put on the hopper.

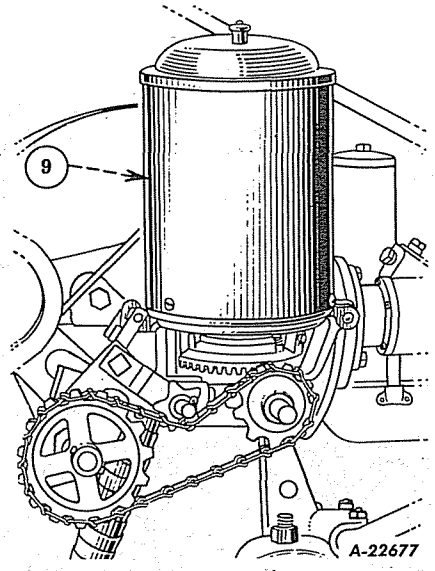
CUB-172 ONE-ROW RUNNER PLANTER



Illust. 25
Single Seed Hopper.

1. Clamp the attaching bars to the tool bar. Leave the clamps loose enough to slide on the tool bar.
2. Slide the ground unit under the tractor and attach it to the universal mounting frame as shown. **Tighten the nuts securely.**
3. Slide the runner assembly sideways to locate the runner midway between the attaching bars, then tighten the attaching bar clamps securely.
4. Remove the pin through the upper parallel link and the tool bar clamp, replace it with the longer pin found at the end of the pressure rod and secure it with the cotter pin in the second hole.
5. Put the end of the pressure rod over the end of the pin and secure it with the quick-attachable cotter.
6. Line up the pressure rod assembly parallel with the runner and clamp the pressure rod bracket to the tool bar with the U-bolt.
7. Attach the covering blade to the press wheel left frame rail.
8. Attach the seed tube to the hopper bracket and the tube retainer.
9. Put on the hopper. For other types of hoppers, *see Illusts. 26, 27, 28, 29 and 30.*

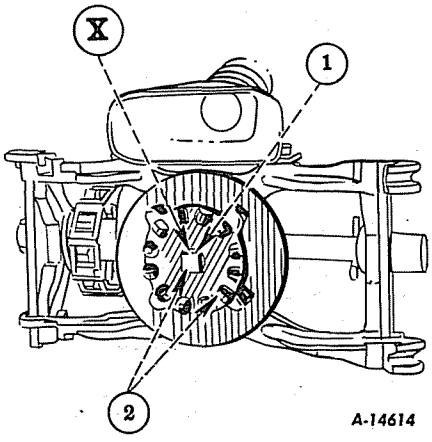
RICHMOND CORN HOPPER



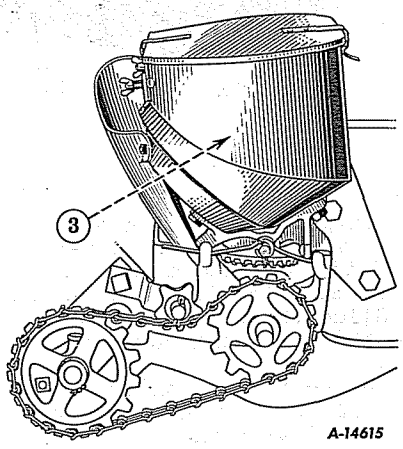
Illust. 26

For Instructions, refer to page 29.

TYPE "C" DUPLEX HOPPER



Illust. 27



Illust. 28

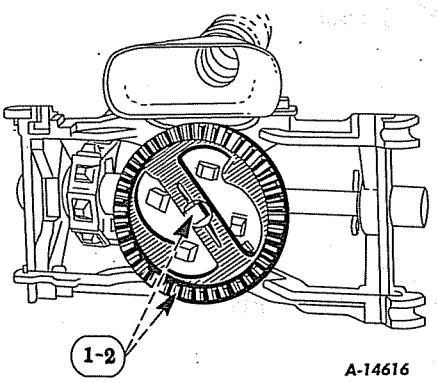
1. Remove the plug bolt from the center hole in the ring gear.

2. Place the driving gear on the gear plate so the lugs on the driving gear fit down into the holes in the face of the gear plate. Hold in place with bolt "X" furnished with the driving gears.

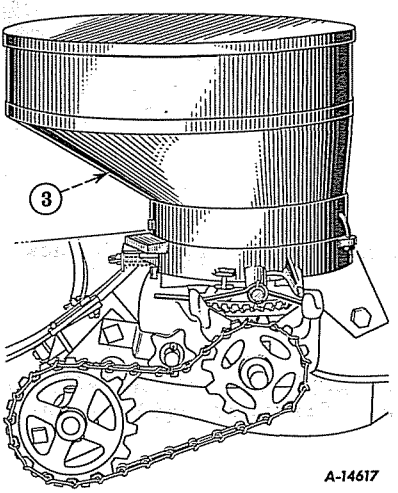
3. Put on the hopper.

NOTE: The driving gears with the number of cogs that will give the desired planting distances should be selected. See paragraph "TYPE "C" DUPLEX HOPPER" in the Adjusting and Operating Instructions.

TYPE "POAX" REVERSE FEED HOPPER



Illust. 29



Illust. 30

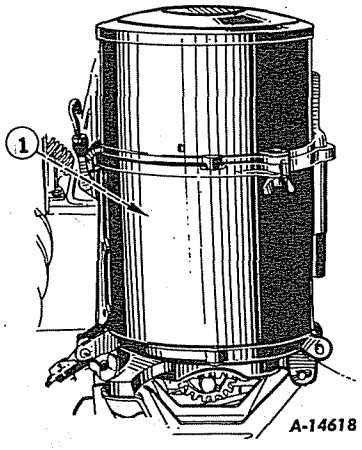
1. Remove the plug bolt from the gear plate. Place the ring gear on the gear plate so the lugs fit down into the holes in the face of the gear plate.

2. Replace the bolt in the ring gear and the gear plate, and tighten the head of the bolt down against the ring gear.

3. Put on the hopper.

NOTE: See paragraph "TYPE "POAX" REVERSE FEED HOPPER" in the Adjusting and Operating Instructions.

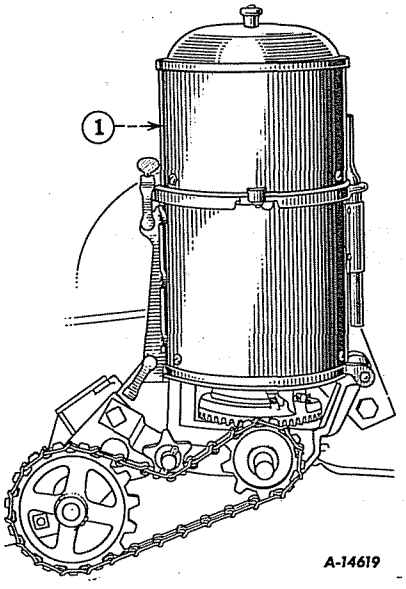
NO. 23 CORN AND PEA ATTACHMENT (Special)
(For Planters equipped with Single Seed Hopper)



Illust. 31

1. Attach the hopper as shown.

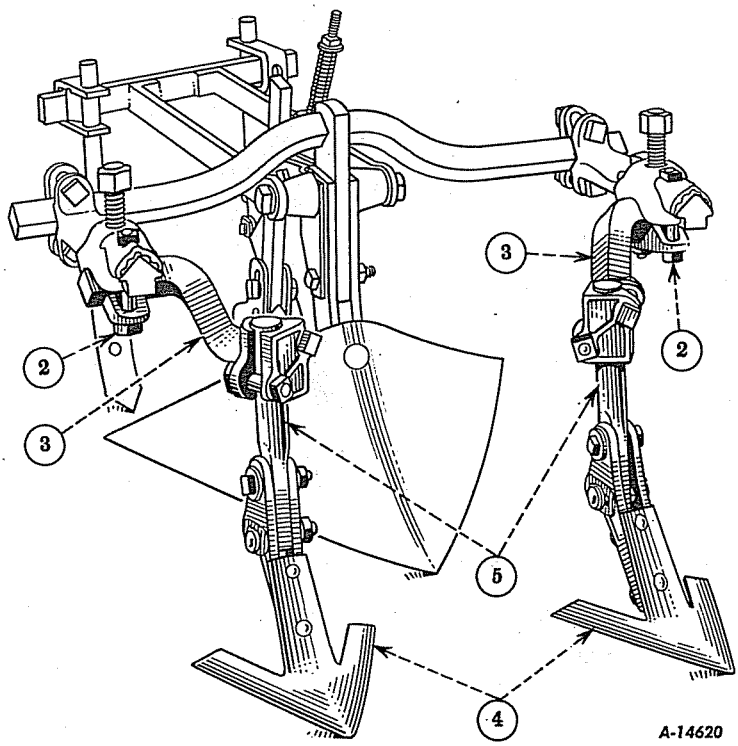
NO. 27 CORN AND PEA ATTACHMENT (Special)
(For Planters equipped with Richmond Corn Hopper)



Illust. 32

1. Attach the hopper as shown.

CULTIVATOR STANDARD ATTACHMENT (512 355 R1) (Special)
(For Cub-171 Blackland Planter)



Illust. 33

1. Remove the planter ground unit from the universal mounting frame and remove bolts "K". *See Illust. 23.*

2. Insert the longer bolts in place of the bolts removed, and attach the tool bar extension cap as shown.

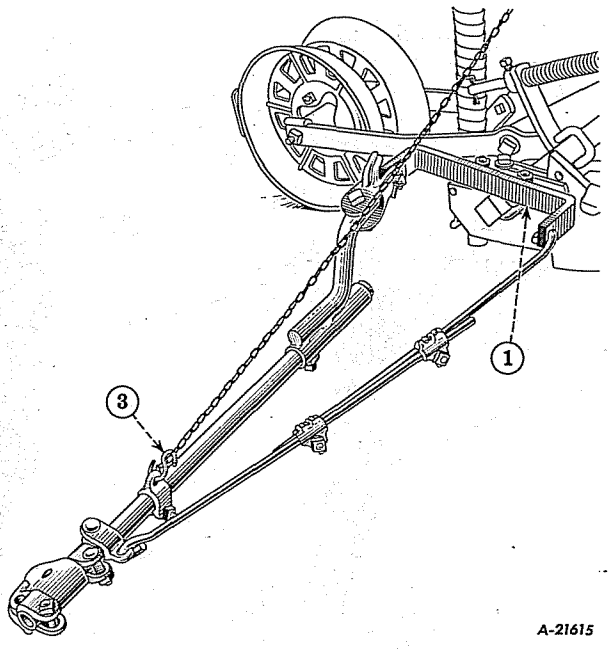
3. Clamp the tool extension (furnished with this attachment) to the tool bar as shown.

4. Bolt the sweeps to the friction trips as shown.

5. Attach the friction trips, complete with the sweeps, as shown and tighten all nuts securely.

6. Reattach the planter ground unit to the universal mounting frame.

MARKER ATTACHMENT (Shoe Type) (512 354 R91) (Special) (For Cub-172 Runner Planter)



Illust. 34

Right side of tractor.

1. Attach the marker attachment bracket to the ground assembly frame bar as shown and tighten the nuts securely.

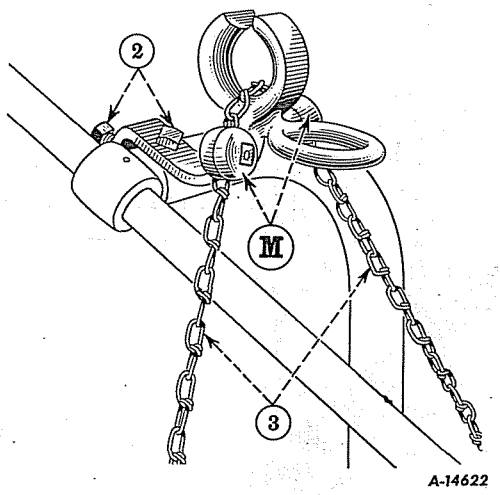
2. Remove the bolt from the tractor steering post and attach the chain guide, using the longer bolt furnished. *See Illust. 35.*

3. Put on the marker chain. *Also see Illust. 35 and page 18* in the Adjusting and Operating Instructions.

4. FOR TRACTORS WITHOUT LIGHTING EQUIPMENT: Put on the drive sight post and the drive sight. *See Illust. 36.*

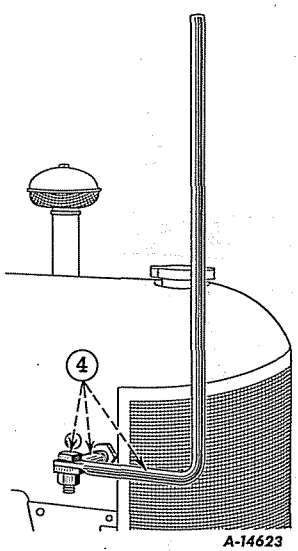
FOR TRACTORS WITH LIGHTING EQUIPMENT: Remove the nut from the right lamp, attach the drive sight and replace the nut and tighten securely. *See Illust. 37.*

MARKER ATTACHMENT (SHOE TYPE) (512 354 R91) (Special) - Continued
(For Cub-172 Runner Planter)



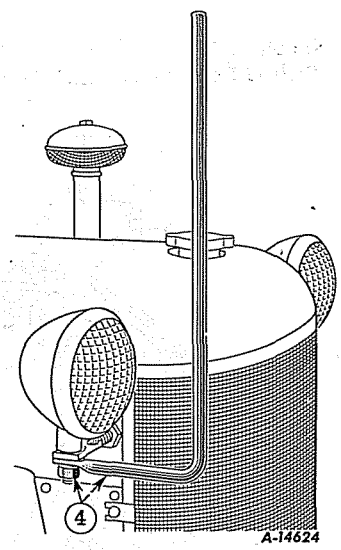
Illust. 35

For instructions, refer to page 34.



Illust. 36

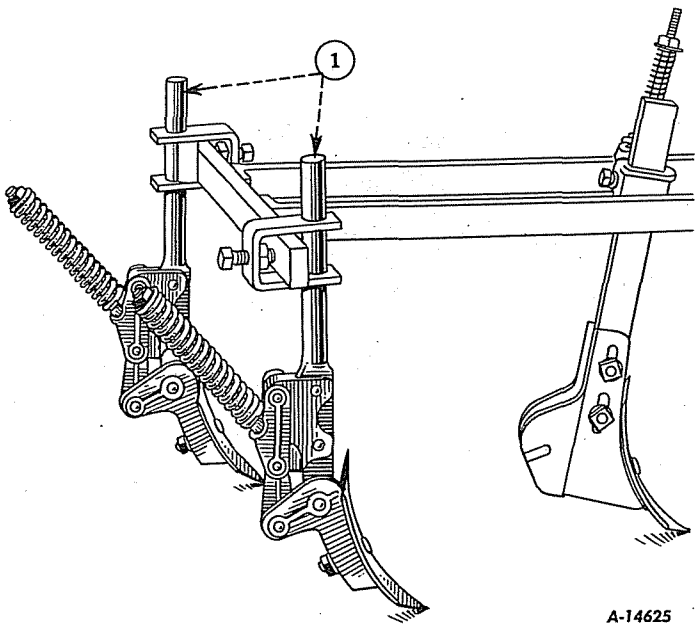
Drive sight on tractor without lighting equipment.



Illust. 37

Drive sight on tractor with lighting equipment.

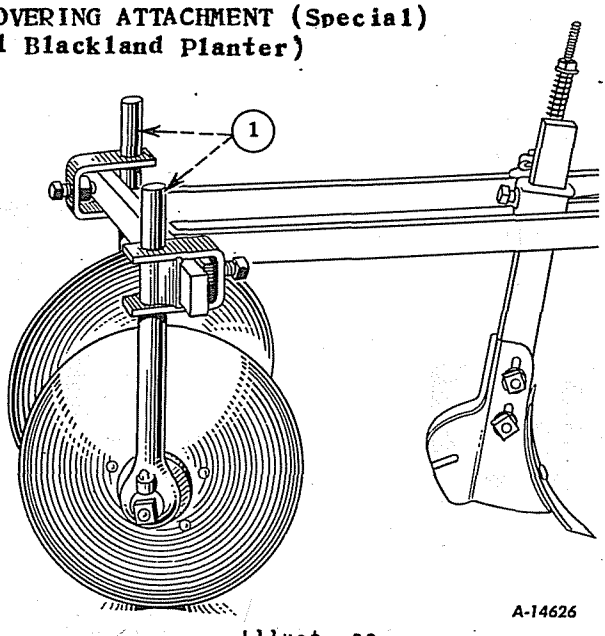
NO. 14 SPRING TRIP SHOVEL COVERING ATTACHMENT (Special) (For Cub-171 Blackland Planter)



Illust. 38

1. Clamp the spring trips, complete with shovels, on the covering frame as shown.

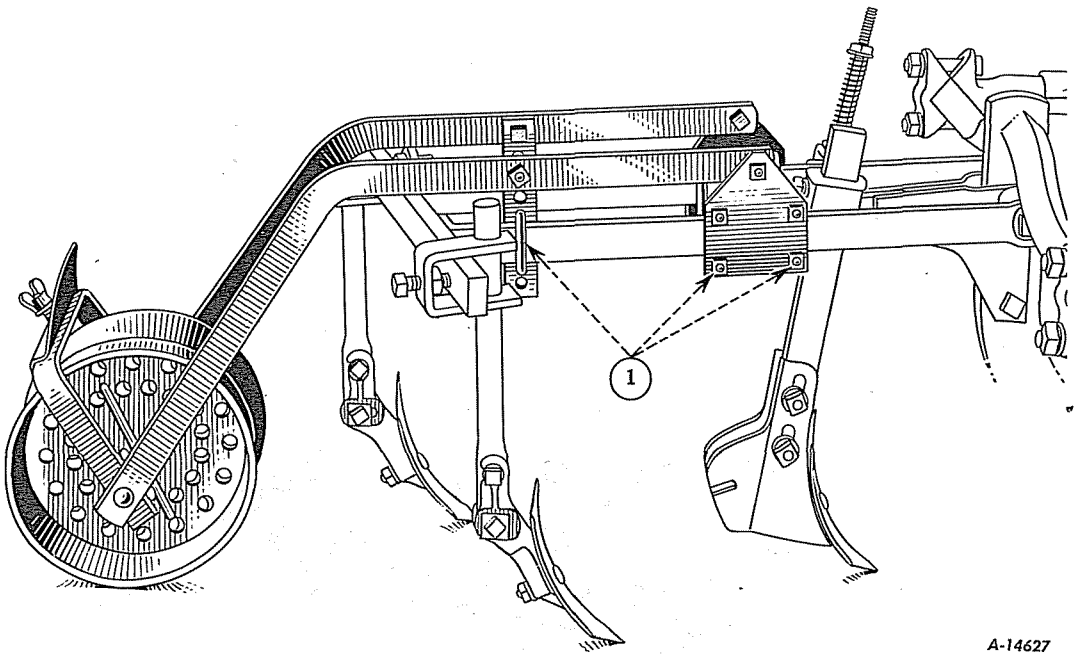
NO. 19 DISK COVERING ATTACHMENT (Special) (For Cub-171 Blackland Planter)



Illust. 39

1. Clamp the disk coverers on the covering frame as shown.

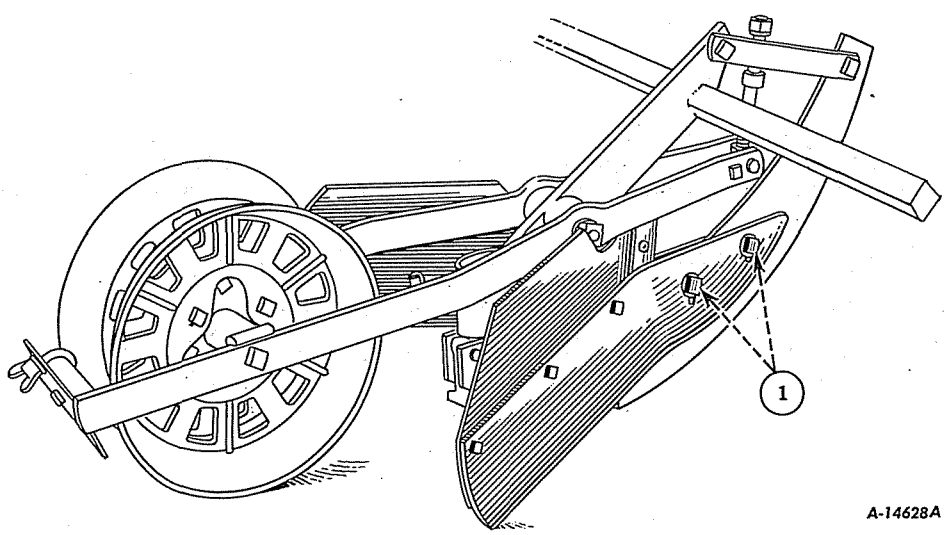
POSP-6399 PRESS WHEEL ATTACHMENT (Special)
(For Cub-171 Blackland Planter)



Illust. 40

1. Attach the press wheel arms, complete with press wheel, to the covering frame by means of the plates and U-bolts as shown.

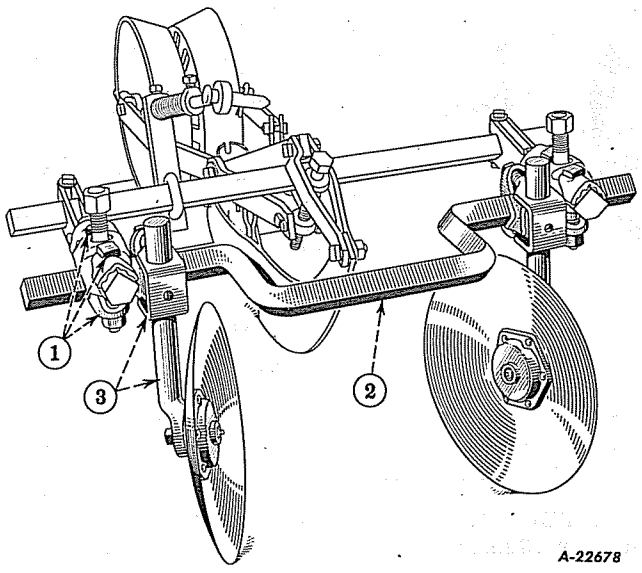
RUNNER WINGS AND DIRT SHIELDS (511 916 R91) (Special)
(For Cub-172 Runner Planter)



Illust. 41

1. Attach the runner wings, complete with the dirt shields, to the planter runner as shown.

BEDDING ATTACHMENT (Special)
(For Cub-172 Runner Planter)



Illust. 42

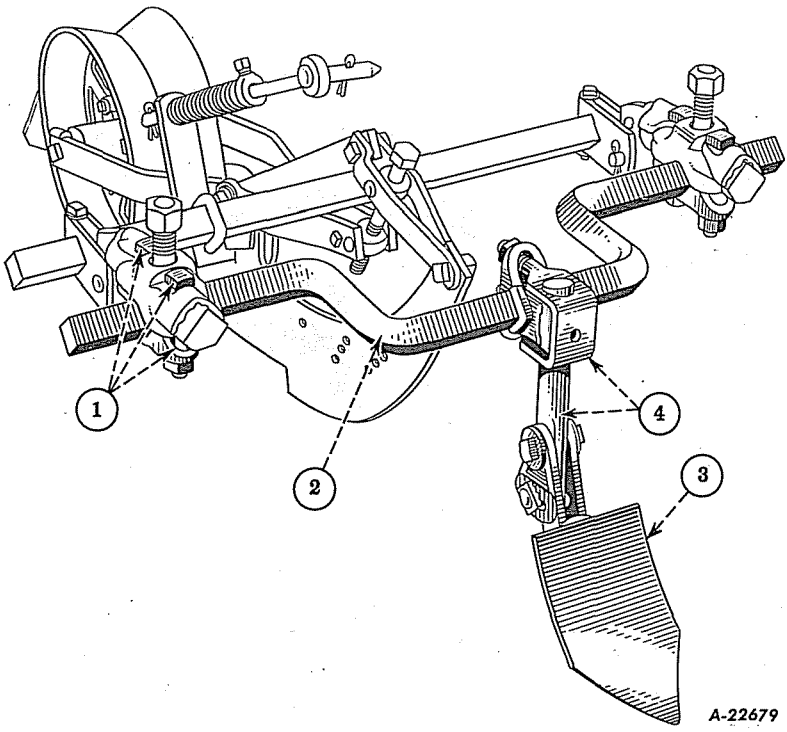
1. Remove the ground unit from the mounting frame and remove the short bolts holding the leveling shims to the tool bar extensions. Replace these bolts with the longer bolts furnished and attach the bedding tool bar cap.

2. Clamp the bedding tool bar to the tool bar extension as shown.

3. Clamp the bedding disks to the tool bar as shown.

4. Place the ground unit under the tractor and reattach it to the mounting frame.

FURROWING ATTACHMENT (Special)
(For Cub-172 Runner Planter)



Illust. 43

1. Remove the ground unit from the mounting frame and remove the short bolts holding the leveling shims to the tool bar extensions. Replace these bolts with the longer bolts furnished and attach the tool bar cap.

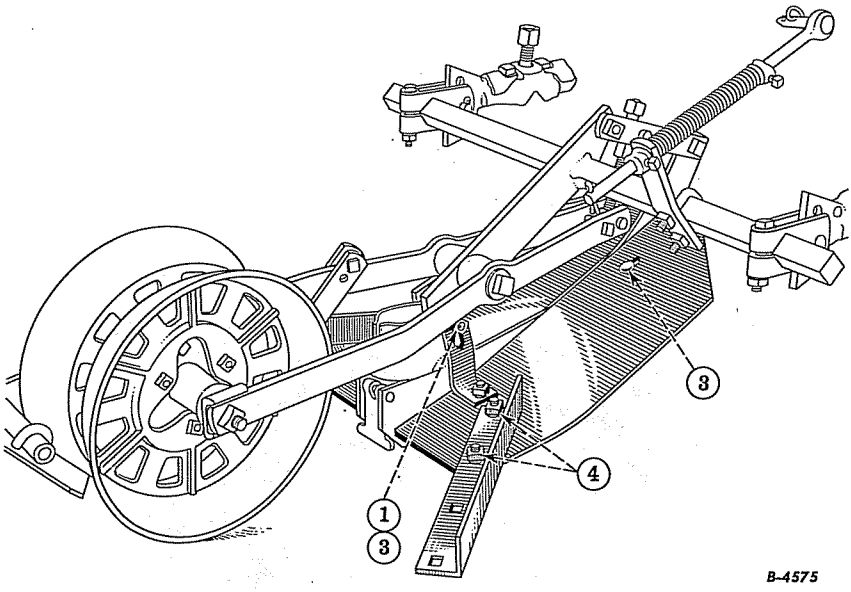
2. Clamp the tool bar to the tool bar extensions.

3. Bolt the opener shovel (a sweep may be used if desired) to the standard.

4. Clamp the standard with the shovel to the tool bar. Set it to run in line with the runner.

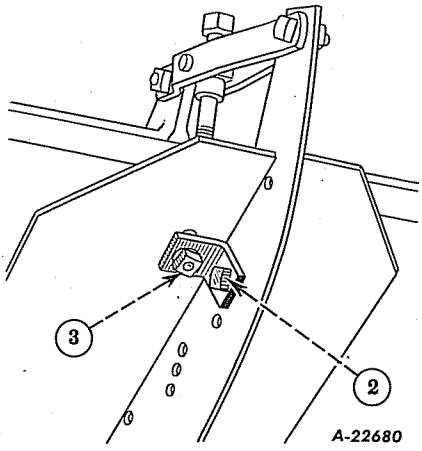
5. Place the ground unit under the tractor and reattach it to the mounting frame.

GAUGE SHOE ATTACHMENT (Special)



Illust. 44

1. Bolt the rear gauge shoe braces to the runner, using the square spacers inside of each brace.
2. Bolt the front gauge shoe braces to the runner. *See Illust 45.*
3. Loosen the bolts holding the gauge shoes to the front braces and adjust the gauge shoes to give the desired planting depth. **Tighten all bolts securely.**
4. Bolt the clod sweeps to the gauge shoes as shown.



Illust. 45

Farm Accidents can be prevented with your help

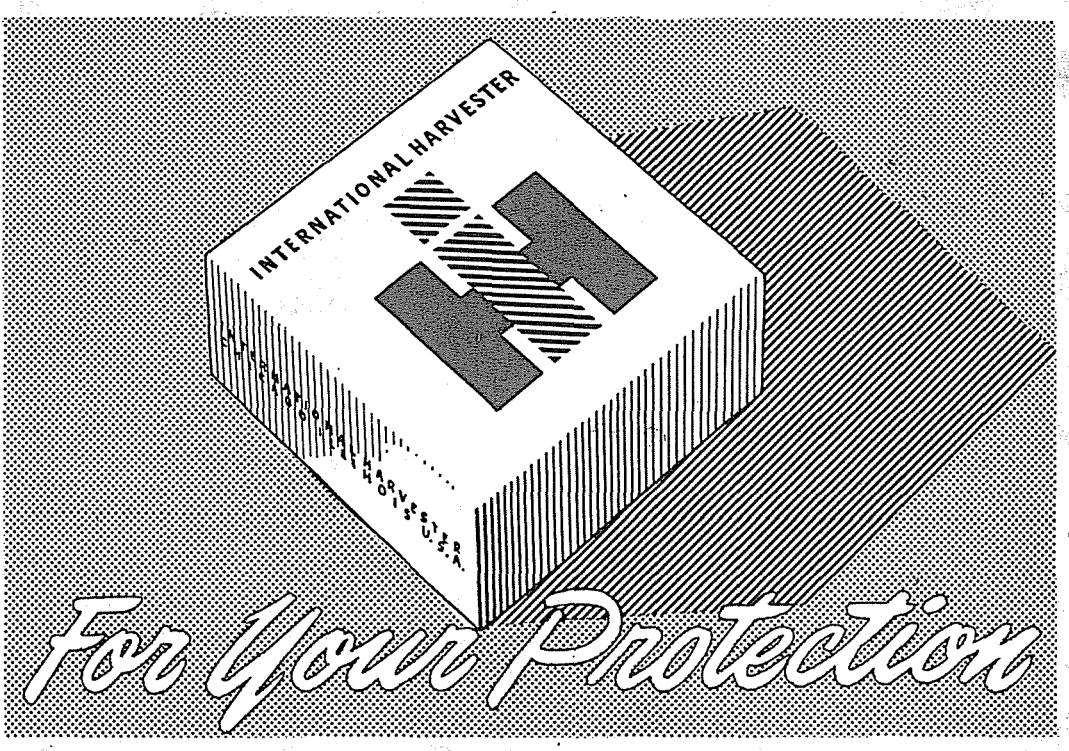
No accident-prevention program can be successful without the wholehearted co-operation of the person who is directly responsible for the operation of equipment.

To read accident reports from all over the country is to be convinced that a large number of accidents can be prevented only by the operator anticipating the result before the accident is caused and doing something about it. No power-driven equipment, whether it be transportation or processing, whether it be on the highway, in the harvest field or in the industrial plant, can be safer than the man who is at the controls. If farm accidents are to be prevented—and they can be prevented—it will be done by the operators who accept a full measure of their responsibility.

It is true that the designer, the manufacturer, the safety engineer can help; and they will help, but their combined efforts can be wiped out by a single careless act of the operator.

It is said that ***"the best kind of a safety device is a careful operator."*** We ask you to be that kind of an operator.

NATIONAL SAFETY COUNCIL



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The finest engineering skill and the most advanced manufacturing methods go into all International Harvester products. Each part is built to our own high manufacturing standards. These are important things to remember when wear and tear make new parts necessary.

IH parts retain and continue the original performance you get when you choose International Harvester quality products. When replacing parts, don't handicap your equipment. For your protection, be sure to use IH SERVICE PARTS.

International Harvester dealers' bins are well stocked with IH parts. These parts departments are well-equipped service stations staffed by factory-trained servicemen. Dealers are backed in every case by the full facilities of a nearby International Harvester District Office.

When selecting new farm operating equipment, keep in mind the protective service rendered by the International Harvester dealer in your community.

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